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ABSTRACT

This report assesses the progress of the six summative Home Start projects as evaluation families completed their first twelve months of enrollment. Home Start, a federally-funded 3-year (1972-1975) home-based demonstration program for low-income families with 3- to 5-year-old children was designed to enhance a mother's skills in dealing with her own children and to provide comprehensive social-emotional, health and nutritional services. Aspects examined in this report include: overall national statistics on families, staff, and costs; organization and staffing of local projects; kind and quantity of services delivered; operational problems previously identified; mother and child outcomes; descriptive program costs; program cost-effectiveness; and cost-relevant program characteristics. The data examined in this report were gathered in fall 1974, through site visits, outcome measures, and quarterly information reports. Findings are presented in three different parts of this volume: program analysis results, summative evaluation results and cost-effectiveness results. (Author/MS)

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NATIONAL HOME START EVALUATION: INTERIM REPORT VI

TWELVE-MONTH PROGRAM ISSUES, OUTCOMES AND COSTS

March 24, 1975

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NATIONAL HOME START EVALUATION
INTERIM REPORT VI:
TWELVE-MONTH PROGRAM ISSUES, OUTCOMES, AND COSTS

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I

INTRODUCTION

Purpose and Organization

The purpose of this report is to assess the progress of the six summative Home Start projects[1] as evaluation families completed their first twelve months of enrollment. Many different aspects of the projects are examined in this report, including:

- Overall national statistics on families, staff, and costs;
- Organization and staffing of local projects;
- Kind and quantity of services delivered;
- Operational problems previously identified;
- Mother and child outcomes;
- Descriptive program costs;
- Program cost-effectiveness; and
- Cost-relevant program characteristics.

The data examined in this report were gathered in fall 1974, through site visits, outcome measures, and quarterly information reports. The findings are presented in three different parts of this volume:

Part A: Program Analysis Results

Part B: Summative Evaluation Results

Part C: Cost-Effectiveness Results

Home Start Program Overview

Home Start is a program for disadvantaged preschool children and their families which is funded by the Office of Child Development, U. S. Department of Health, Education, and Welfare. The program started in March of 1972 and has been funded for a three-year demonstration period. Home Start is a home-based program providing Head Start-type comprehensive (nutrition, health, education, and social/psychological) services to low-income families with 3-5 year old children. A home-based program provides services in the family home rather than in a center setting.

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[1] The six sites include: Huntsville, Alabama; Dardanelle, Arkansas; Wichita, Kansas; Cleveland, Ohio; Houston, Texas; and Parkersburg, West Virginia.

A unique feature of Home Start is that it builds upon existing family strengths and assists parents in their role as the first and most important educators of their own children.

The Home Start program has four major objectives, as stated in the national Home Start Guidelines (December 1971):

- to involve parents directly in the educational development of their children;
- to help strengthen in parents their capacity for facilitating the general development of their own children;
- to demonstrate methods of delivering comprehensive Head Start-type services to children and parents (or substitute parents) for whom a center-based program is not feasible;
- to determine the relative costs and benefits of center- and home-based comprehensive early childhood development programs, especially in areas where both types of programs are feasible.

Presently 16 Home Start programs, funded by the Office of Child Development, are in operation. Each program receives approximately $100,000 with which to serve 80 families for a 12-month period. Participating families come from a wide variety of locales and many different ethnic and cultural backgrounds -- including white, black, urban, rural, Appalachian, Eskimo, Navajo, migrant, Spanish-speaking, and Oriental.

Home Start program staff consist primarily of "home visitors", who visit the homes of enrolled families once or twice a week. In addition to working with the mother on matters of child development, the home visitors discuss nutrition, health, and social and psychological needs of family members. When needed, home visitors or other program staff refer families to community agencies for specialized services.

Families enrolled in Home Start also participate in group activities or meetings on specific topics, such as parent effectiveness or health. Each program has a policy-making council, which includes Home Start parents as members, to set policy for the local Home Start project.

Further information on the Home Start program can be found in:

> "The Home Start Demonstration Program: An Overview" (February, 1973), Office of Child Development. This booklet acquaints the reader with the overall Home Start program as well as introducing the 16 individual projects.

"A Guide for Planning and Operating Home-Based Child Development Programs", (June, 1974), Office of Child Development. Based on the 16 Home Start projects, this guide details what is involved in planning and operating a home-based child development program.

Home Start Evaluation Overview

The National Home Start Evaluation incorporates three distinct components: the formative evaluation, the summative evaluation, and the information system. The three are complementary ways of viewing the effects of Home Start. While all sites participate in the formative evaluation and information system, only six, selected as being representative of the rest of the programs, are involved in the summative evaluation.

Formative evaluation. The formative evaluation provides basic descriptive information about key aspects of individual Home Start projects. This information is used to give feedback about project implementation and to establish a context for the statistical and analytical findings. Elements of the formative evaluation include project-by-project case studies, observation of home visits, analysis of staff time-use patterns, and development of cost models. Trained interviewers gathered formative data by visiting each of the 16 projects to interview staff and to review project records. They visited the six summative sites each fall and spring, and visited the remaining 10 sites each spring.

Summative evaluation. The summative evaluation provides information about Home Start's overall effectiveness by measuring changes in parents and children. Two features characterize this kind of evaluation in the Home Start program. First, there are "before-and-after" measurements of parent and child performance along criteria provided in the Home Start Guidelines. Measures used for the evaluation include:

- Preschool Inventory
- Denver Developmental Screening Test
- Schaefer Behavior Inventory
- High/Scope Home Environment Scale
- 8-Block Sort Task
- Parent Interview
- Child Food Intake Questionnaire
- Height and Weight Measures
- Pupil Observation Checklist
- Mother Behavior Observation Scale

Second, there is a randomly assigned, delayed-entry "control" group of families who did not enter the Home Start program until after they participated in one complete cycle of fall and spring testing. Outcomes for these control families, who had not yet experienced Home Start, were compared to outcomes for Home Start families who had received full benefits. Control families are receiving a full year of Home Start benefits now that their "control" year is finished. Some additional comparison data were gathered from Head Start families in four sites.

Before-and-after measurements have been collected from the six summative sites each October and May. Local programs were given a full year to become operative, during which time the summative evaluation was limited to a pilot tryout of procedures. Data from the second year are presented in the current report. The data were gathered by locally hired community interviewers who received special training twice each year.

Information system. An information system, designed to gather basic statistics about each of the 16 programs, forms the third component of the national evaluation. Information is gathered quarterly on family and staff characteristics, services provided to families, and program financial expenditures. These statistics are needed to help local and national staff make better administrative decisions, to assist in the interpretation of summative evaluation outcomes, and to serve as input to the cost-effectiveness analysis of the Home Start program. The necessary information is gathered by local program staff members as part of their routine record-keeping activities; then the information is summarized into quarterly reports which are sent to national staff.

Comparisons with Head Start. In addition to making comparisons between Home Start families and the control families, some comparisons have also been made with Head Start programs in four of the summative sites.[1] These comparisons include the summative results reported in Chapter IX and the cost-effectiveness findings reported in Chapter XIII. Although it is believed that these comparisons add another dimension to the evaluation, there are at least three reasons why they should be interpreted with extreme caution. First, Head Start centers were located in only four of the six Home Start locations. Second, we have no information about whether the four Head Start programs that happened to be in these Home Start communities are representative of all Head Start programs in the country, whereas the six Home Start programs are representative of all 16 demonstration programs. Finally, since the pattern of benefits and services provided by the two different types of programs is so different, and in many ways are not directly comparable, these differences must be kept in mind as program effects or program costs are examined.

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[1] Huntsville, Alabama; Dardanelle, Arkansas; Houston, Texas; Parkersburg, West Virginia.

Previous evaluation reports. Further information on the national Home Start evaluation can be found in reports prepared for the Office of Child Development by the High/Scope Educational Research Foundation and Abt Associates Inc. The following Home Start evaluation reports are available through the ERIC Document Reproduction Service (P.O. Box 190, Arlington, Virginia 22210):

- Interim Report I (August, 1972)
  - 1. Formative and Summative Evaluation (ED 069 439)
  - 1.A. Case Studies (ED 069 440)
  - 1.B. Case Studies (ED 069 441)
- Interim Report II (July, 1973)
  - Program Analysis (ED 091 074)
  - Summative Evaluation Results (ED 085 398)
  - Case Studies IIA (ED 091 081)
  - Case Studies IIB (ED 092 225)
- Interim Report III (August, 1973)
  - Evaluation Plan 1973-1974 (ED 092 227)
  - Program Analysis (ED 092 226)
  - Summative Evaluation Results (ED 092 229)
  - Case Study Summaries (ED 092 228)
- Interim Report IV (May, 1974;not yet in the ERIC system)
  - Program Analysis
  - Summative Evaluation Results
  - Field Procedures Manual
- Interim Report V (October, 1974; not yet in the ERIC system)
  - Executive Summary
  - Summative Evaluation Results
  - Program Analysis
  - Costs and Cost/Effectiveness Analysis
  - Case Studies
  - Summative Evaluation Instruments
  - Program Analysis Instruments
  - Field Procedures Manual

Each report is based on a 6-month interval of data collection. Early reports (I, II, III) focus on the initial planning and pilot stages of the evaluation. Later reports (IV, V) present pretest and 7-month posttest results of the formal evaluation stage; Report VI presents 12-month posttest results; Report VII, the final in the series, will compare 18-month Home Start outcomes to 7-month outcomes.

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NATIONAL HOME START EVALUATION

Interim Report VI:
Part A: Program Analysis

March 24, 1975

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II

INTRODUCTION TO PROGRAM ANALYSIS SECTION

The Program Analysis section of this report presents information about the Home Start Program in terms of project operations and services provided to families. The section is divided into five chapters which address:

- Basic facts about the Home Start Program from October 1, 1973 to September 30, 1974. This chapter is intended to provide a brief overview of the operation of the Home Start Program during the past year. Facts include information about project enrollment and staffing, the home visit, and services provided to families outside the home visit.

- Issues which are relevant to policy-makers of future home-based programs. These issues were identifed for future study in Interim Report V.

- Other methodological and programmatic issues which may become policy-relevant. These issues are presented to provide a broader picture of certain aspects of program operations, and either were identified in Interim Report V or became evident during analysis of the fall 1974 data.

- Costs of providing home-based services. Both Office of Child Development expenditures and total resource costs, including levered resources of goods and services, are discussed in this chapter.

- A more comprehensive overview of the Home Start Program and the evaluation results to date. Some issues for consideration in implementing and evaluating future home-based programs.

The analyses presented in this section of the report are based on data collected during the fall 1974 site visits to the six summative projects. In addition, data from the home visit observations which were made this fall by community interviewers are used, as are data from the Home Start Information System. The fall data collection instruments and the methodology used for preparing this report are described in detail in Appendix A.

In previous reports, data concerning the Home Start projects were given on a quarterly basis. In this report, however, to provide a more complete overview of project operations, information is presented for a one-year period beginning on October 1, 1973 and ending September 30, 1974. This time period was chosen because it most closely corresponds to the Home Start project year which starts in the fall when most new families enter the project. The period selected does not coincide with the Home Start Information System, which starts April 1, or the funding cycles of the Home Start projects, which begin on different dates throughout the year.

Many of the fall analyses replicate those presented in Interim Report V. In most cases, the results confirm the findings of that report and are not presented again in detail. Where findings are different, comparisons are made, with the spring data, and reasons for the differences hypothesized.

To clarify the terms used in this report:

- project refers to the individual sites, while program refers to the National Home Start Program.

- focal parent and focal child are those members of the enrolled family who participate in the home visit. Most often the focal parent is the mother who is at home and not working. While the family may contain several children, there is always one child who is the focus of the treatment and who is therefore considered the focal child. At times in this volume we have omitted the term focal and used just parent and child.

- summative families are those families who are being tested to assess the outcomes of Home Start. These families are served by six summative Home Start projects: Alabama, Arkansas, Kansas, Ohio, Texas-Houston, and West Virginia.

- figure applies to those charts which are located within the body of the chapter; a figure usually appears directly after the page on which it is mentioned. Tables are in a separate section located at the end of the report.

III

HOME START OVERVIEW: FALL 1973 TO FALL 1974

Introduction

The purpose of this chapter is to present a factual overview of the Home Start Program and to provide a framework for subsequent sections of the report which address a number of specific issues. Included here is information about family enrollment and staff for the National Home Start Program as well as for the average project, facts about the typical home visit, and information about other services provided to families outside the home visit. Tables III-1 through 5 present detailed figures including variations on a site-to-site basis.

The Home Start Program

During the past year, the sixteen Home Start Demonstration projects were in their second year of operation. During that time fifteen of the projects[1] served a total of 1894 families, 2462 focal children and 3788 children between the ages of zero and five. Average quarterly family enrollment, however, was only 1094 -- nearly 40% lower than the total yearly enrollment. This high family turnover rate is caused primarily by the number of children of kindergarten age who left the project during the summer and were replaced by other children in the fall. Table III-1 presents enrollment figures which show project-by-project variations in the number of families and children served.

At the end of the quarter ending September 30, 1974 Home Start projects employed 163 staff members, serving a total of 1082 families. This resulted in an average staff/family ratio of 1:6. There were 103 home visitors among the total staff, so that the average home visitor served ten families - a caseload which is well within the 9 to 13 range recommended in Interim Report V.

Home Start projects served an average of 126 different families during the year and an average of 74 per quarter. Focal child enrollment for the average project was 164, or 93 per quarter, and during the year the average project reached 239 children between the ages of zero and five, or 140 per quarter.

The Home Start Participants

The typical Home Start project has eleven staff members: a director, a specialist, a home visitor supervisor, a secretary/

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[1] Enrollment figures for the Texas-TMC project were not included since Information System data were received for only three quarters.

bookkeeper, and seven home visitors. The composition of project staff, however, varies considerably from site to site. The typical home visitor is a female who is 34 years old, has completed high school and spent some time in college. Before joining the Home Start project, she was employed in a job which in some way related to her work as a home visitor. She has been with the project for 20 months and has a family of her own.

The focal parent served by Home Start is usually the mother, who is in her mid-twenties. She has had some high school education and has a family with three or four additional members. This family is supported by an average family income which is under $6,000. About one quarter of the Home Start families are headed by the focal parent alone.

Family Treatment

Family treatment consists primarily of the home visit. The typical home visit occurs once a week and lasts for approximately 90 minutes.[1] There are at least three participants in the visit: the home visitor, the focal child, and the focal parent. In 85% of the homes in which there are siblings, the siblings also are involved in the home visit.

Sixty percent of the home visit time addresses child activities, and 92% of this time is spent on either school readiness or physical development. The remainder of the home visit time is devoted to parent activities -- primarily the parent's personal and general concerns and training the parent in child education. The new data obtained during the home visit observations made this fall reconfirm that Home Start is a family development program, aimed not only at educating children, but also at helping the entire family.

During the home visit, the home visitor interacts with the focal child 42% of the time and with the focal parent 28% of the time. Most of the remaining time is spent in three-way interactions. The home visitor initiates over 80% of the activities -- a mode which is consistant with her role as teacher. In more than three quarters of the visits observed the home visitor suggested things for the parent to do before the next visit, and in nearly half of the visits there was some discussion of things the mother had done since the last visit. These findings indicate that home visitors are encouraging parents and children to work together on Home Start-type activities between home visits.

In addition to home visits, families participate in a number of other activities, including:

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[1] The average length of the home visit as recorded on the Home Visit Observation is 72 minutes.

- brief visits by the home visitor to see a sick child, remind the family about a meeting, or to drop off materials or clothing for the family;
- trips to the doctor, dentist, social service agency or other places which the family needs to visit;
- group meetings for focal children and/or parents;
- Parent Policy Council Meetings.

During the seven week period October 1 to November 16, 1974,[1] over three quarters of the Home Start families were involved in one or more of these activities. This is discussed in more detail in Chapter V: Other Home Start Issues.

Families also received a number of community services through referrals by the home visitors. During the past year, 15,277 referrals which resulted in service delivery were made in 15 of the Home Start projects, an average of 1,018 per project. An average of seven referrals were made per family: four for health needs, two for psychological and social services, and one in the area of nutrition. About half the families enrolled in the program were referred for educational needs of the parent or child. The focal child was the primary recipient of referral services, receiving more than half of all referrals made.

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[1] Reporting period for which Home Visiting Records are available.

IV

POLICY ISSUES

Introduction

A number of programmatic issues which are relevant to policy makers were identified for further study in Interim Report V. Answers to these questions are presented in this chapter based on analyses of data collected during the fall site visits to the six summative sites. The discussion of the issues and recommendations is primarily addressed to decision makers at the national, regional, and local levels to help them improve the operations of existing or continuing home-based projects and/or to develop guidelines for establishing other projects to serve low-income families with pre-school age children in a home setting.

The special study issues reported in this chapter discuss the following four policy-relevant questions:

- Is Home Start serving families for a 12-month period or are projects following the school year?
- What changes would enrolled families like to see in the overall make-up of the in-home treatment, and what implications do these changes have for future home-based projects?
- To what extent are Home Start families utilizing available community resources, and what policy decisions can affect this situation?
- What are Home Start projects doing to help parents provide better nutrition for their families?

A number of other issues were studied for this report which do not have immediate implications for policy makers, but which address major methodological questions and describe the operations of the Home Start Program in further detail. These issues are reported in Chapter V.

- Is Home Start serving families for a 12-month period or are projects following the school year?

Information System data have shown a definite decrease in family enrollments during the summer months, primarily because families terminate during the summer while newly recruited families do not start to receive services until the fall. Data were collected this fall to find out more about the summer activities of the Home Start projects and to make some recommendations about the summer operations of the projects.

A major reason why a number of families terminate during the summer is because the focal child starts public kindergarten or first grade in the fall. This suggests that the Home Start year is parallel to the regular school year and that families are served for less than a 12-month period. This finding was confirmed through interviews with the directors of the six summative Home Start projects, who estimate that the projects are fully operational for an average of only 10.6 months out of the year, and that home visits are made during only 8 months. The figures cited are averages for the six summative sites; as is shown below there are tremendous variations in terms of the number of months the projects are operational and in the number of home visits that home visitors can be expected to make.

Although some projects are not operational for the entire year, they do not close down during the summer. All project staff are employed for a full 12-month period, except in Alabama which maintains only a skeleton staff during the summer months to keep up communications with the enrolled families, to plan for the next year, and to recruit new families. The other five projects continue operations with a slight shift in emphasis in activities. In Ohio and Texas, for example, the summer months are used for staff vacations, training, planning for the coming year, or for recruiting new families and staff. In Arkansas and Kansas, about half of the enrolled families are actively involved in different types of project activities during the summer months, while the other half participate only to a minimal extent until the beginning of September. Project directors suggest that school vacations which affect other siblings cause a number of families not to participate fully in project activities. Family summer vacations or the presence of additional siblings in the home interrupt the regular home visiting schedule. Some parents find it difficult or impossible to attend group meetings because siblings need to be cared for at home. Only in West Virginia does the project remain fully operational during the summer, and even there the project director indicates that participation in Home Start activities decreases during the summer because of school or staff vacations.

Even though most projects continue to provide services to families throughout the summer, families actually participate in home visits for the equivalent of only eight months out of the year. Figure IV-I shows that home visitors are unable to make home visits for eight weeks out of the 10.5 months that the average Home Start project is operational. Home visitors in the Texas project do not visit their families for 2.9 weeks out of the year, while Kansas project staff are unable to make regular home visits for 16.5 weeks. Reasons why home visits are not made are presented in Table IV-I. On the average, almost half of the eight-week period is taken up by staff vacation time or holiday celebrations such as Thanksgiving, Christmas, New Year's and Easter; a quarter of the time is spent in in-service training or staff visits to other Home Start projects. The remaining quarter is taken up by other activities.

In addition to holiday celebrations and training, home visitors are likely not to make visits to some of the families for miscellaneous reasons, such as illness on the part of the home visitor, focal parent or child, or other emergencies. The Time Use data reported in Interim Report V indicated that home visitors on the average do not visit with one family each week for these reasons. Home visitor caseload figures for the September 30, 1974 quarter and the length of the project year were used to determine that the average family does not receive home visits during 3.7 additional weeks.

It should be pointed out that the figures presented above are based on Staff Time Use data reported in Interim Report V, which only estimate the number of home visits missed each week. Home Visiting Records on summative families indicate the actual number of weekly visits made. These records are currently kept by home visitors and will be used in the Final Report to verify and update the information reported here regarding the Home Start program year.

Figure IV-1 shows for each of the six summative sites, the number of months the project is fully operational (Column 1), the number of weeks that home visits are not made because of training and staff vacations (Column 2), and the number of weeks no home visits were made because of miscellaneous reasons (Column 3). The total column on the right side of the table represent Column 1 minus the sum of Columns 2 and 3 to arrive at the maximum number of week families can be expected to be visited during the year. It is obvious that there are two types of operational models being followed by the projects -- one which remains fully operational for eleven to twelve months out of the year (West Virginia, Arkansas, Kansas) and one which operates for less than an 11-month period (Ohio, Texas-Houston, and Alabama). In terms of the maximum number of weeks families are expected to be visited, there are three clusters of projects: one in which

FIGURE IV-I

HOME START PROGRAM YEAR

SITE	LENGTH OF HOME START PROGRAM YEAR	# OF WEEKS NO HV'S ARE MADE	# OF WEEKS FAMILY NOT VISITED FOR MISC. REASONS*	MAXIMUM NUMBER OF WEEKS FAMILIES ARE VISITED DURING A YEAR
ALABAMA	38.7 weeks (9 mos)	4.0	2.1	32.6 weeks (7.6 mos)
ARKANSAS	47.3 weeks (11 mos)	4.3	3.6	39.4 weeks (9.2 mos)
KANSAS	50.7 weeks (11.8 mos)	16.5	3.0	31.2 weeks (7.3 mos)
OHIO	43.6 weeks (10 mos)	12.5	3.5	27.0 weeks (6.3 mos)
TEXAS - HOUSTON	43.0 weeks (9.8 mos)	2.9	3.9	36.2 weeks (8.4 mos)
WEST VIRGINIA	52.0 weeks (12 mos)	7.5	5.9	38.6 weeks (9.0 mos)
AVERAGE	45.7 weeks (10.6 mos)	8.0	3.7	34.2 weeks (8.0 mos)

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*Based on time use information collected in the spring of 1974 which indicated Home Visitors fail to visit one of their families a week as a result of miscellaneous reasons.

home visits are made from 39.4 weeks to 36.2 weeks (Arkansas, West Virginia and Texas-Houston), one in which home visitors make visits to their families from 32.6 to 31.2 weeks (Alabama and Kansas), and one in which home visitors make visits to their families for only 27 weeks (Ohio).

Concern was raised in the previous report regarding the fact that many families are not visited weekly. It was hypothesized that the number of "missed" visits would be kept to a minimum if home visits were conducted at the same time each week. All home visitors are encouraged to do this by their directors or supervisors, although they may not always be able to adhere to the schedule because of illness or emergencies. Parent interview data obtained from 234[1] summative families indicate that more than three-quarters of the families are visited at the same time each week; 84% of the families also indicated that the home visitor never or seldom skips a visit; 4% said this happened frequently, and 12% said they did not know since they had only been visited once or twice by the home visitor prior to the interview. Parents were asked whether they ever request that their home visitor not come because the visit is inconvenient. Over one-third of the parents responded "yes," ranging from 10% in Alabama to over half the families in Texas.

Summary

While most of the Home Start projects are operational during the summer months, regular home visiting with the typical family is conducted for only the equivalent of eight months out of the year. This indicates that families receive an average of 34 home visits during the course of the year. There is considerable across-site variation in terms of the number of months projects are operational and the maximum number of weeks home visits can be expected to be made. During the summer months, there is a definite shift in emphasis of project activities and a decrease in family participation. This suggests that Home Start projects might consider minimizing project activities during that period, as is done in Alabama, thereby reducing the overall cost of providing Home Start services to families. Before such a recommendation can be made, however, summative evaluation findings are needed to determine to what extent the non-participation of families in project activities during the summer months affects parent and child outcomes.

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[1] Although more families were administered the Parent Interview, some newly enrolled families (18%) could not respond to the questions.

- What changes would enrolled families like to see in the overall makeup of the in-home treatment and what implications do these changes have for future home-based projects?

In the fall an attempt was made to ascertain whether or not parents are pleased with the 90-minute home visit which they receive each week. This section addresses this issue as well as the feasibility of increasing the frequency and length of the home visit and the implications of such changes for project operations.

As part of the summative measurement battery,[1] information was obtained from 234 summative focal parents to determine whether or not they would like to see an increase in the frequency and length of home visits. Over half of the families interviewed (56%) would like to see the number of weekly home visits increased from once to twice a week or more often. Data received from home visitors on the frequency and length of home visits made in the fall indicate that the majority of families are visited weekly. A few families were visited twice a week but this does not occur on a regular basis. Some of the families indicated that they would like to have the home visitor come "every day" of the week or at least "every other day."

Slightly more than half the families are pleased with the one- to two-hour home visits they are currently receiving. Some families indicated they would like a slight increase in home visit time within the one- to two-hour range. The Parent Interview data show that some families (5%) are visited less than one hour per home visit. About one quarter of the families would like to have the home visitor stay for more than two hours (23%), with a small number of these families indicating that they "wouldn't mind if the home visitor stayed all day or as long as she could."

Figure IV-2 indicates how parents feel about both the frequency and length of home visits. The first column shows the actual frequency and length of home visits to families who do not want a change in treatment. The treatment desired by families who would welcome a change in the frequency and length of home visits is reported in the second column. The responses of the two groups of families were then combined to arrive at a desired treatment profile. In general, families would like to be visited more frequently, while they are pleased with the one to two hour home visits they are receiving. Profiles for each of the six summative projects, showing the frequency and length of home visits desired by families, are presented in Table IV-2. It is interesting to note that a small number of families would like to see a change in the home visiting schedule to "once a week," which seems to imply that they are not receiving home visits on a regular basis.

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[1] Parent Interview

FIGURE IV-2

PROFILE OF HOME VISIT FREQUENCY AND LENGTH DESIRED BY FAMILIES

	Actual Treatment of Families Not Wishing a Change	Treatment Desired by Families Wishing a Change	Total Families Interviewed
Frequency of Home Visits			
Total # of Families Interviewed	87 (37%)	147 (63%)	234
Once a week	36%	5%	41%
Twice a week	-	39%	39%
More than twice a week	-	17%	17%
Don't know	1%	2%	3%
Length of Home Visits Visits			
Total # of Families Interviewed	133 (57%)	101 (43%)	234
Less than 1 hour	5%	1%	6%
From 1 to 2 hours	47%	18%	65%
From 2.1 to 3 hours	3%	12%	15%
More than 3 hours	-	8%	8%
Don't know	2%	4%	6%

It is clear that the home visiting schedule suggested by parents would significantly reduce the home visitor caseloads, resulting in an increase in per family cost and a decrease in the number of families that could be served by the project if no additional funds were made available. The parental views expressed, however, either indicate that parents like the project but want more of it or that parents are becoming more and more dependent on the home visitor in terms of dealing with various aspects of their daily lives. The question of how dependent families are on the home visitors and how projects are "graduating" their families from the project when the child reaches kindergarten age will be addressed during spring field visits to the sixteen Home Start projects and will be discussed in the next report.

Summary: Parent Interview data strongly suggest that parents would like an increase in the frequency and length of home visits. The desire of parents for this increase indicates that some families are extremely pleased with the home-based approach to preschool services. Since there is no evidence at this time to suggest that additional in-home treatment would result in greater focal parent and child gains, as is discussed in the Cost-Effectiveness Volume of Interim Report V, no increase in the frequency and length of home visits is recommended.

- To what extent are Home Start families utilizing available community resources and what policy decisions can affect this situation?

One of the major goals of the Home Start program is to aid families in the use of community resources. In the Summative volume of Interim Report V, however, it was reported that Home Start families did not use significantly more resources than control families, based on the results of the Parent Interview. The object of collecting additional, more detailed data on community resource utilization was to investigate the accuracy of that finding and to identify policy-relevant reasons why Home Start families were not making full use of available resources. Since the target families for Home Start are those who are eligible for but not receiving Medicaid, food stamps and food commodities, the instrument used for data collection focused on the eligibility of Home Start families for these particular community resources. It was also designed to determine why eligible families were not using the resources. In order to gain a more complete picture of community resource utilization, discussions with project staff during site visits also covered this topic.

Site staff were extremely surprised to hear the results reported in the Summative Volume. A large number of them felt community resources had been one of the principal emphases of their project and an aspect of the program which had been relatively successful. Several sites felt that the Parent Interview neglected to mention community resources which Home Start families were using frequently. In West Virginia, staff mentioned mothers earning drivers licenses and parents pressuring the state road commission to repair roads and the local school board to send school buses closer to their homes. One staff member commented that many more parents in West Virginia now see their children's public school teachers as accessible resources rather than as inaccessible threats and have begun to talk with them about their children's progress in school. Staff in Kansas mentioned lead poisoning control centers, family planning projects (not necessarily Planned Parenthood), and psychiatrists (only mental health clinics are included in the questionnaire); Ohio staff added the following: podiatrist, Health Museum (provides health education and demonstrations), Salvation Army, Project Search (provides funds for continuing education), adult education courses at the community college, and services available through the delegate agency which families are not aware of before joining Home Start (family and youth counseling, and homemaker services). They also mentioned that much of their progress in community resources has been with Spanish-speaking families who are not part of the testing sample. Many projects prepare a pamphlet for use by home visitors and families listing a great number of available community resources.

In addition to the problem of resources not listed in the Parent Interview, staff pointed out other difficulties in the data obtained by community interviewers. Parents may be unwilling to admit to a relative stranger (the community interviewer) that they are receiving public assistance. They may forget what resources they have used, or more commonly, not recognize the name even if they remembered the service. For example, some families call their Medicaid cards "health cards." One staff member also suggested that evaluating resource utilization only in terms of the number of families that had heard of it or used it was misleading. A much more important aspect of community resources is providing families the correct resource and guaranteeing that they will independently be able to contact that resource by providing the proper background information and instructions.

The data collected on Medicaid and food stamps[1] support the claim that Home Start families are making use of at least these community resources, although our data did not indicate whether or not Home Start had had an impact in this area. Of the 288 families about whom data were collected, 160 or 56% were using food stamps, while 22% were not eligible, mostly because their income level was too high. Figure IV-3 shows the relevant data on families' use of food stamps. These use figures are higher than those reported in last fall's Summative Volume, where 42% of the families were reported currently using food stamps, as opposed to 56% here.

It is most important to discuss the 54 families (17%) who are reported eligible for food stamps but are not receiving them. The highest percentage of such families came from the rural projects (Alabama, Arkansas, Texas and West Virginia) while the urban projects (Kansas and Ohio) showed only 7% and 0% respectively of their families eligible for but not receiving food stamps.

Home visitors listed several reasons why eligible families were not receiving food stamps. The most prevalent of these was that, due to the family income level, food stamps cost too much to be worth the bother. Our data do not indicate, however, how much these families would have to pay for food stamps. If they would pay nearly face value, it may not be worth the trouble of applying. If, however, they would pay only 50% of face value, it is possible that further exploration of the issue with the family could change their attitude.

A similar situation exists with the second most common reason why families do not accept food stamps: pride. Many families feel that they want to "make it on their own," and one

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[1] Food commodities are no longer available in the areas of Home Start serves.

FIGURE IV-3

USE OF COMMUNITY RESOURCES: FOOD STAMPS

Food Stamps

	Receiving	Not Receiving Not Eligible	Not Receiving Eligible	Missing	Total
Alabama	29 48%	18 21%	18 29%	1 2%	61 100%
Arkansas	26 47%	17 30%	13 23%	-- --	56 100%
Kansas	24 53%	13 29%	3 7%	5 11%	45 100%
Ohio	31 81%	4 11%	-- --	3 8%	38 100%
Texas-Houston	14 37%	15 39%	9 24%	-- --	38 100%
West Virginia	36 72%	2 4%	11 22%	1 2%	50 100%
Total	160	64	54	10	50
Average Across Sites	56%	22%	17%	4%	

family even said they wouldn't take food stamps because other families needed them more. Again, more intense educational discussions with these families might help change their attitudes.

One decision which must be made on a national level in a program like Home Start is what the role of the home visitor should be when a family's attitudes prevent its receiving a community resource. Should the home visitor make the family aware of the availability of such services? Or is there an additional responsibility to attempt to change family attitudes and, if so, to what extent? This decision obviously would affect the way home visitors deal with the "eligible but not receiving" families discussed above.

The difference between urban and rural sites in the number of eligible families not receiving food stamps may be due to the relative inaccessibility of the food stamp office. In an urban area, transportation to such offices is rarely a problem, while in rural areas it is often an impossible barrier. The amount of "bother" associated with getting food stamps is certainly greater for many rural families. If the transportation problem is really a major deterrent to eligible families in rural areas, rural home-based projects should consider focusing more on finding ways to overcome this difficulty.

The number of Home Start families who are not eligible for food stamps is larger than those who are eligible for them but not receiving them. The major barrier to families' eligibility, according to directors, is the number of items they must document for the food stamp office. Proof of residence, usually utility bills, is required. Most important is proof of income level. In at least some states, this is calculated on the basis of the incomes of every member of the household, which may include grandparents, aunts, cousins and other relatives. All members of the household must be able to document their incomes. In Texas, several families were unable to qualify because the father could not document the fact that he worked only seasonally or part-time. Another problem is varying guidelines; in West Virginia, each county interprets food stamp guidelines separately.

The picture of Home Start family Medicaid usage is slightly different, as shown in Figure IV-4. Across the six sites, 37% of the Home Start families are using Medicaid. As in the case of food stamps, the percent reported here is higher than that reported in the Summative Volume, which indicated that 26% of the families were currently using Medicaid. Almost half of the families (48%) were reported as not being eligible for Medicaid services. The dichotomy between urban and rural sites was again very marked. In Kansas and Ohio, 64% and 74% of the families were using Medicaid, respectively, while the percentages ranged from 14% to 30% in the rural sites. In West Virginia, where 56% of the families were reported ineligible, Medicaid was not available for a family before January 1, 1975, unless they were also on welfare, and many of the families do not qualify for welfare. In some counties, Medicaid is not available at all, as reported by home visitors.

FIGURE IV-4

USE OF COMMUNITY RESOURCES: MEDICAID

Medicaid

	Receiving	Not Receiving Not Eligible	Not Receiving Eligible	Missing	Total
Alabama	10 16%	43 71%	-- --	8 13%	61 100%
Arkansas	8 14%	42 75%	1 2%	5 9%	56 100%
Kansas	29 64%	13 75%	-- --	3 9%	45 100%
Ohio	28 74%	2 5%	-- --	8 21%	38 100%
Texas-Houston	10 26%	20 53%	7 18%	1 3%	38 100%
West Virginia	15 30%	28 56%	1 2%	6 12%	50 100%
Total	100	148	9	30	50
Average Across Sites	37%	48%	4%	11%	

Only 4% of the families for whom data are available are eligible for Medicaid but not receiving it. The majority of these are in Texas, where several families have just not applied, although some have been referred by home visitors. Other families are in the process of applying or don't want to accept Medicaid for reasons of pride.

While there is again a marked difference between urban and rural sites, the distinction in the case of Medicaid is along the eligibility dimension. In the urban sites, an average of 69% of the families are eligible, while in the rural sites, only 27% of the families are. It is not clear whether these differences are due to eligibility requirements or to income levels. In many states, eligibility for Medicaid depends on eligibility for welfare and, in general, welfare guidelines are stricter than those for Home Start. Welfare recipients in some states cannot own property or cars. This may be one factor which accounts for the difference in eligibility between rural and urban areas, for many rural families own a small piece of land which, although it isn't worth much, makes them ineligible for welfare. In Arkansas, where families are eligible for Medicaid only if on welfare, the welfare guidelines require that there be only one parent in the home. A two-parent household is eligible only if one parent is disabled.

If the data on food stamps and Medicaid are examined together, it is apparent that the number of families for whom data are reported "missing" is almost as large as those who are reported "eligible but not receiving." This group represents those for whom the home visitors did not report eligibility and/or usage data. Home Visitors may not have recorded a family's eligibility because they did not know about it; on further investigation, they may find that some families are indeed eligible and may help them gain access to the resource in question.

Summary: Most (90%) eligible Home Start families are receiving Medicaid, and 75% of the eligible families are receiving food stamps. Data obtained from self-administered home visitor questionnaires indicate higher usage of community resources than data from the Parent Interview which were reported in the Summative Volume of Interim Report V.

Because a large number of the families reported eligible for but not receiving food stamps had reasons which might be addressed by more aggressive educational programs, a national home-based program should consider to what extent it wants home visitors to go beyond basic education on community resources toward attempts to change family attitudes. In addition, rural/urban differences in the percentage of families receiving food stamps point out the need for examining the role of transportation in rural sites and the possibility of concentrating project resources on providing transportation, should it prove important.

- **What are Home Start projects doing to help parents provide better nutrition for their families?**

One of the findings reported in Interim Report V suggested that there is comparatively little emphasis on nutritional issues during the home visit. In addition, the Summative Volume reported that no significant child nutritional gains had been detected. These findings suggested that projects might not be adhering to the Home Start guidelines, which state that: "In Home Start the nutrition component is aimed primarily at helping parents make the best use of existing food resources, through food planning, buying and cooking." To obtain a more accurate picture of the actual effort being made by Home Start projects to assist families in the area of nutrition, a nutrition interview was administered at each of the six summative projects during the fall 1974 site visits. The interview addressed two primary areas:

- How do Home Start projects help home visitors with nutrition activities? (Presence of special staff; time spent by special staff on nutrition activities; pre-service training and continuing nutrition education of home visitors);

- How are Home Start projects reaching families about the nutritional needs of their children? (Presentation method; importance of content areas; needs assessment; materials used; vitamin pills).

The interview did not, however, attempt to assess the relative importance of nutrition within the Home Start program, either in terms of project emphasis or in terms of the percentage of total project time spent on nutrition. It is evident that project staff do not give nutrition primary emphasis.

According to the results of the interviews, four of the sites (Alabama, Arkansas, Ohio and Texas-Houston) employ a trained nutritionist who is either a part-time Home Start staff member or who consults on a regular basis. In West Virginia a registered nurse,who serves as Health Coordinator on a full-time basis,is responsible for planning nutrition activities, and in Texas-Houston a nurse also assists with nutrition planning. Only in Kansas do individual home visitors plan their own nutrition activities, and there one person is responsible for the distribution of literature, etc.

Figure IV-5 reports the average time spent per week on nutrition activities by special staff. On the average more than a day each week is spent by special staff on planning and delivering nutrition services to families. It should be noted that in Texas-Houston, which shows nearly three times as many hours per week spent on nutrition, a major new effort is underway to educate parents about nutrition. This effort was spurred both by a regional consultant before summative findings were made known to programs and by increasing parental concerns about the need to plan and shop more wisely because of rising food prices. The times recorded for Texas in Figure IV-5 are totals for three staff members who are currently involved in nutritional effort.

FIGURE IV-5

SPECIAL STAFF WEEKLY NUTRITION TIME USE
(in hours)

	Ala.	Ark.	Kansas	Ohio	Texas	W.Va.	Average
Planning	1.5	1	-	4	5.5	1	2.6
Training	1	.5	-	2	3.5	1	1.6
Consulting	.5	1	-	1	5	3	2.1
Direct Services		.25	-	1	6	2.5	1.95
Parent Meetings		3	-				.6
Total Time	3	5.75	-	8	20	7.5	8.85

Time spent in each of the six projects for pre-service nutrition training for home visitors is shown in Figure IV-6. It is evident that the Ohio Home Start project heavily emphasized nutrition during pre-service training. If Ohio is included in across site averages, an average of more than 13 hours were spent in staff meetings and more than four hours were spent providing individual help. Excluding Ohio from these averages, the figures reduce to three hours and one hour, respectively.

FIGURE IV-6

PROJECT TIME SPENT ON NUTRITION TRAINING
(in hours)

	Ala.	Ark.	Kansas	Ohio	Texas	W.Va.	Average
Staff meetings	3	1	6	64	4	1	13.2
Individual help	0	2	0	20	0	3.5	4.25

The six projects are more consistent in the hours per month spent on continuing education, as shown in Figure IV-7; on the average two hours a month are spent in staff meetings and forty minutes are spent providing individual help to home visitors.

FIGURE IV-7

PROJECT TIME SPENT PER MONTH ON
CONTINIUNG STAFF NUTRITION EDUCATION (in hours)

	Ala.	Ark.	Kansas	Ohio	Tex-H	W.Va.	Average
Staff meetings	.5	1.5	0	4	4	2	2
Individual help	.5	.5	0	2	0	1	.67

For three of the six summative projects - Arkansas, Ohio, and Texas-Houston, - the primary way of presenting nutrition information to parents is through parent group meetings. In Alabama and Kansas, information is presented primarily through the home visit, and in West Virginia it was estimated that nutrition information is presented through home visits 75% of the time and through parent group meetings 25% of the time.

Figure IV-8 shows the number and types of nutrition activities which were observed for a sample of families in the fall of 1974. The results indicate that half of the nutrition activities observed involved primarily education about nutrition needs while one-third involved active assistance in meal planning and preparation.[1] In general the patterns observed during the home visit confirm the presentation method results obtained during the nutrition interview: in Texas and Ohio, which rely primarily on parent group meetings to present ideas on nutrition, fewer nutrition activities were observed; in Alabama, Kansas and West Virginia, which use home visits to present nutrition, there were far more nutrition activities. Only in Arkansas do the results seem inconsistent and may be explained if it is assumed that even though the project emphasizes presenting nutrition through parent group meetings, a number of nutrition activities nonetheless take place during the home visit. Although the number of nutrition activities observed this fall was less than the number observed last spring, the site patterns remained quite similar. It may be reasonable to assume that this decrease in nutrition activities is seasonal; spring is a time for planning and planting gardens while in late fall crops have been harvested and less time and energy are invested in food-related activities.

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[1] The remaining activities were classified as miscellaneous.

FIGURE IV-8

NUMBER OF TIMES VARIOUS NUTRITION SUBJECTS WERE ADDRESSED DURING FALL 1974 HOME VISIT OBSERVATION

	Discussion of Diff. Food Groups	Disc. of Likes/Dislikes of Child/Nutr. Eval.	Discuss Importance of Nutr/Balanced Meals	Discuss Food Suppl. Vit./Iron/Fluoride	Discuss Sugar Intake of Kids	Recipe Sharing/ Food Preparation	Meal Planning/Food Planning	Disc. Imp. of Making Attrac./Nutr. Meals for Kids	Food Stamps	Canning/Freezing Food Preservation	Misc.	# Family	# Activity*	# of Home Visitors
ALABAMA	1	-	-	2	5	4	-	-	-	-	1	7	11	5
ARKANSAS	11	-	9	9	-	10	4	6	2	2	6	18	38	7
KANSAS	11	8	-	2	-	-	1	-	-	-	6	8	23	5
OHIO	1	1	-	-	-	-	-	-	-	-	2	4	4	3
TEXAS	-	2	-	-	-	1	-	-	-	-	-	2	2	2
WEST VA.	3	7	-	1	0	12	4	-	1	0	7	16	30	9
TOTAL	27	18	9	14	5	27	9	6	3	2	22	55	108	31

* The number of activities indicated is less than the sum of the individual subjects noted because some activities addressed two or more subject areas.

As a part of the nutrition interview, the nutritionists and other persons responsible for nutrition activities were asked to rank the five content areas according to their importance in the nutrition activities which are conducted with parents. These areas were:

- children's daily nutritional needs
- essential food groups; nutritional composition of foods
- menu planning; recipes
- shopping for wholesome, economical foods
- cooking and storing methods for different foods

Figure IV-9 displays the results of the ranking in each site. Overall, the daily nutritional needs of children is considered to be the most important content area, followed by, in order, essential food groups, shopping for wholesome, economical foods, menu planning, and cooking. It is apparent that more emphasis is placed on educating parents about nutrition than on actually helping them plan and prepare meals - a result which is consistent with the nutrition activities observed this fall. It should be noted that staff at several sites complained that it is difficult to rank the content areas because of considerable overlap within nutrition activities.

FIGURE IV-9

SITE RANKINGS OF NUTRITION CONTENT AREAS

	Ala.[1]	Ark.	Kans.	Ohio	Tex-H.[2]	W.Va.	Average
Daily needs	1 1	1	2	2	1 1 1	1	1.2
Food groups	3 2	2	1	1	2 4 2	4	2.3
Menu planning	5 3	4	2	3	3 3 5	3	3.4
Shopping	2 4	3	2	4	4 2 2	2	2.8
Cooking, storing	4 5	5	2	5	5 5 4	5	4.4

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[1] Two persons responded in Alabama.

[2] Three persons responded in Texas.

In four of the six summative sites (Alabama, Arkansas, Ohio and Texas-Houston) local staff attempted to assess the diets of at least some of the Home Start families. A food questionnaire was administered to specific families in Alabama, and diet histories of all Home Start families were obtained in Arkansas and Ohio. The Texas-Houston Home Start project staff talked to parents individually about their family's diets, and they plan to use a 24-hour diet history to evaluate all families. Projects in Kansas and West Virginia indicated that they had not yet tried to assess the general diet needs of families.

When asked if they had attempted to provide vitamin pills to any families, only two of the Home Start projects -- Alabama and Ohio -- responded "no." The Kansas project provides vitamins only with a doctor's approval and in the fall of 1974 was supplying only eight families. In Texas-Houston approximately 20 families have been introduced to vitamin pills by the Home Start project, but then only on the recommendation of a doctor. Generally, the Texas project does not continue to supply vitamins after they have been introduced. West Virginia ensures that families receive vitamins from the State Department of Health as long as they are enrolled in Home Start, and Arkansas gives a vitamin/fluoride supplement to all Home Start children.

All of the projects visited this fall supplied examples of materials about nutrition which are given to Home Start families. These materials included:

- shopping checklists and buying guides
- charts about food groups, how the body uses food, etc.
- information about food costs
- lists about the nutrients and calories contained in typical servings
- suggested snack foods
- pamphlets about nutrition, dental health, etc.
- tips about homemaking and home safety
- low cost recipes

The nutritionists and other personnel indicated that in addition to the materials which are distributed, the presentations at parent group meetings, and the activities undertaken during the home visit, still other methods are used to help improve nutrition, including:

- taking families on shopping tours
- starting food co-ops
- helping families both with gardening and with the canning, drying and preserving of garden produce
- providing films about nutrition
- helping parents use coupons
- co-ordinating pot luck dinners
- arranging nutrition and dental workshops
- setting up a seed and plant exchange
- publishing a Home Start recipe book

Several problems such as rising food costs, difficulty in obtaining food stamps, and the time it takes to improve a family's eating habits also were mentioned during the interviews.

Summary

The results of the nutrition interview indicate that, in general, the Home Start projects are addressing the nutritional needs of families in a manner which appears to be consistent with the Home Start guidelines. Since the guidelines do not specify a level of effort, however, it is not possible to make absolute judgments about the sufficiency of project nutrition activities. The primary method of presenting information is through parent group meetings, and there is more emphasis on educating parents about their family's nutritional needs than on assisting with the planning and preparing of meals. Four projects have attempted to assess the nutritional needs of Home Start families, and only two projects do not supply vitamin supplements for at least some families.

Despite project activities, however, there has been no indication that children are in fact benefitting from the projects' efforts as measured by the Child Food Intake Questionnaire, which uses 24-hour recall. This finding raises an important question: How adequate are the present Home Start guidelines in the area of nutrition? At this time Home Start does not provide meals in the home for children on a continuing basis and does not explicitly recommend that projects employ one or more full time nutritionists to work directly with families. It is clear that guidelines for future home-based programs should consider these or other alternatives if significant gains are expected in children's nutrition.

V

OTHER HOME START ISSUES

Introduction

In addition to the policy issues reported in the previous chapter, a number of other issues were identified in Interim Report V and during the analysis of the fall data. Some of these issues are methodological in nature; others provide a more comprehensive view of project operations. As a result, the issues do not have immediate implications for policy makers at the national, regional and local level.

It is possible, however, that some of the issues addressed in this chapter will become more policy-relevant after additional and more conclusive data have been collected and analyzed in the spring. These issues then will be re-examined in the final report.

The issues presented in this chapter address the following questions:

- What are Home Start project staff's reactions to the site profiles of the typical home visit which were presented in Interim Report V, and what reasons do they see for differences in home visit characteristics between sites?
- Have home visit characteristics changed significantly since last spring?
- What effect do home visitor's backgrounds and the amount of time home visitors have worked with families have on the characteristics of the home visit?
- Is there variation in family treatment across and within projects?

The issue of the quantity and quality of in-home supervision will not be addressed until the final report because additional information is needed from all sixteen Home Start projects. This information will be collected in the spring.

- **What are Home Start project staff's reactions to the site profiles of the typical home visit which were presented in Interim Report V and what reasons do they see for differences in home visit characteristics between sites?**

Since the Home Visit Observation Instrument addresses measures which can be difficult to quantify, it was felt that feedback from site staff would aid in interpreting the observation data included in Interim Report V. Their generally positive reaction lent credibility to the overall home visit profile and inter-site differences. The discussions also provided project staff an opportunity to talk about changes they would like to make in their own home visit structures and provided insights into how different philosophies about organizing and conducting home visits could result in different home visit characteristics in each site, even with uniform national guidelines. During site visits in the fall, a discussion was held with each project's staff about the home visit profiles. The staff were shown the characteristics of their home visits in terms of interaction patterns, dominant participants, and time spent in various content areas. In addition, across-site averages were made available to the staff to enable them to focus on areas in which their site differed from others. The discussion below focuses on each dimension of the home visit separately -- interaction patterns, dominant person, child content areas and parent content areas.

In discussing interaction patterns, most staff agreed that the patterns reported were indicative of the real home visit situation. In Kansas, where home visitor-focal parent interation was highest, staff were pleased that the data indicated a shift in emphasis from the child to the parent, a change which they had been pushing in their program in accordance with directives from the National Home Start Office. Alabama's staff felt the Home Visit Observation accurately reflected their home visit interaction patterns, which fell very close to the average in all categories. They felt that parent-child interaction, which occurred 21% of the time, and home visitor-parent interaction, which occurred 40% of the time, would both rise in the fall observations. They also hypothesized that parent involvement in the home visit, as evidenced by parent interaction with either the home visitor or the child, would increase as the family stayed in the program.

Texas was unusual in its high emphasis on parent-child interactions (35% of the time) and its low home visitor-parent interactions (12%). The staff responded that the 35% was accurate because parent-child interaction was stressed as an important objective of the Houston Home Start project. Houston staff felt that part of the decreased emphasis on home visitor-parent interactions resulted from the child orientation of many home visitors who had had extensive Head Start experience before joining Home Start. The director is going to continue to encourage more Home Visitor-parent interaction. The West Virginia director expressed a similar opinion; West Virginia was highest on home visitor-focal child interactions in the spring (over 50%) and the director agreed that the data were representative of home visits in her site. She felt that the source of much of the emphasis on the child was the older home visitors -- both those who had been in a child-focused home-based project before entering Home Start and those who were much older than the parent and assumed a "grandmotherly" role in dealing with the child. She intended to use the data provided by the Observation Instrument to try to help those home visitors change their focus during the home visit.

In all but two of the sites, the home visitor was dominant over half the time. Staff in several sites suggested that this finding might be biased by the testing situation. In Ohio, where home visitor dominance was highest, home visitors felt that parents were less agressive when a community interviewer was present. They said that parents often regarded the home visit observation as a test of the home visitor and felt the best way they could help their home visitor would be to be quiet and let the home visitor "show off." The staff in West Virginia, where home visitor dominance also is high, agreed that the predominance of home visitor-dominated activities might be an artifact of the testing situation. However, some staff also stated that the home visitor has to be dominant to be effective in directing the course of the home visit, especially when she first starts working with the family. The director, on the other hand, felt that, ideally, the parent should be dominant in the home visit situation and that this is what Home Start should be working toward. In Arkansas, as well, staff were surprised at how high home visitor dominance was according to the Observation Instrument.

In Kansas and Texas, the home visitor was seen as much less dominant. In Kansas, where the dominance was spread almost equally among home visitor, child and parent, the staff was surprised that the home visitor did not show up as being more dominant. In Texas, on the other hand, the child was dominant over half the time, a pattern quite different from the other sites. Staff in Texas said this pattern was definitely a result of their project's philosophy: children are in the best position to indicate what the next activity should be because they will be interested in it. Thus, home visitors in Texas are encouraged to follow the child's lead in determining what activity to perform next.

In the area of child content, several sites had similar comments. Staff in Alabama and Arkansas expressed concern at the small amount of time recorded on social and emotional development. They felt that social/emotional development was part of every activity -- particularly the school readiness activities. The field staff pointed out to them that the definitions of socialization and self-image (the major components of emotional development) were very specific: socialization is "conversations with child about everyday events; conversation which does *not* specifically relate to any home visit activity or topic" while self-image is defined as "discussions or games about how children see themselves, identifying body parts, emotions." It was pointed out that the interviewers could not know the *intent* of the activity, only its actual content as shown by the words spoken and actions taking place. Staff suggested briefing community interviewers about the underlying intent of the activities, a suggestion which is clearly infeasible, since it would make comparisons between data gathered at different sites or at different times impossible.

The major concern in the area of parent activities was with the category "teaching the parent to teach the child." Although this content area averaged only 10% of the time across sites, home visitors in Arkansas and Kansas felt that many of their activities were geared toward teaching the parent through modeling behavior. Again, it is important to note that observers record only the actual content of the activity, not its intent. Educating the parent about the child is defined as "general discussion with the parent about the child's educational needs, problems, etc. If the home visitor specifically *explains* an activity to the mother and why it is important, this category would be checked. If the mother simply watches the home visitor doing an activity with the child, this category would *not* be checked." West Virginia and Ohio staff both offered reasons for the small amount of time spent on health (3% across the six sites). The Ohio staff said they often work in "units": for a month or so, there will be a greater emphasis on health. This often takes place in the early fall for new families. In West Virginia, the health-related information is often concentrated in visits during which the home visitor take the parent and child to the doctor or dentist and community interviewers never do observations during these visits. One staff member also remarked when she learned that her site emphasized general parent concerns more than any other site: "the home visitor has to be the mother's friend."

Two questions on the Observation Instrument bear directly on the possible effect of the presence of the community interviewer on the home visit, particularly making the parent a less active participant. One of the questions asks whether the home visitor felt the home visit was typical of home visits with this family, while the other asks if the home visitor felt the presence of the community interviewer changed the home visit. Twenty percent of the visits were seen by the home visitor as being atypical, but a comparison of home visit profiles between visits seen as typical and those seen as atypical showed no significant differences. Similarly, in 15% of the home visits, the home visitor said the presence of the community interviewer changed the home visit, but again there were no significant differences between those visits and the other 85%. Thus, there in no evidence that the Home Visit Observation data collected by community interviewers are not representative of most home visits, although it is not possible to conclude from this that the manner in which data are collected has no effect on the home visit.

Summary

In general, Home Start staff agreed with much of the picture presented by the Home Visit Observation data. One exception was their concern about the effect of the presence of the community interviewer on the parent. Home visits in which the home visitor felt the community interviewer had some effect, however, were not discernibly different from other home visits. Other areas of discussion were the definitions of the content areas of the child's social/emotional development and teaching the parent to teach the child. Both areas are more narrowly defined in the Home Visit Observation Instrument than site staff had realized; they felt many activities classified as "school readiness" also fulfilled social/emotional and parent education goals. Therefore, the Observation data may show less emphasis on these two content areas than actually occurs during home visits.

Staff comments also revealed that projects have varying philosophies which are consistent with the National Home Start Guidelines. Project directors have different views on allowing the focal child to initiate home visit activities, encouraging home visitor-focal parent interaction and interpreting definitions of content areas to be addressed in home visits. Each project may interpret the general recommendations on Home Start treatment freely and implement them according to individual decision. While the Guidelines could be more specific in defining the meaning of having the parent be the primary focus of the home visit, the lack of specific detail encourages local projects to be responsive to their families' needs, thus potentially increasing Home Start's effectiveness.

- Have home visit characteristics changed significantly since last spring?

In the last several Interim Reports, there has been much concern expressed about the focus of the home visit. At the beginning of the Home Start program, home visitor-focal child interaction was very high and tended to dominate the home visit. The National Home Start Office emphasized to projects that the home visitor's emphasis should be on the parent and subsequent observations demonstrated an increase in home visitor-focal parent interactions as well as in parent content areas. Meaningful comparisons between spring and fall Home Visit Observation data which would address whether or not the trend toward parent involvement was continuing cannot be made in this report because of major changes in the Home Visit Observation Instrument. Analysis will be done after comparable data are collected in the spring.

The interaction pattern/dominant participant section of the Observation Instrument was changed for two major reasons: to simplify the use, coding and analysis of the form, and to obtain more data on the home visit[1]. In the spring observations, the major interactor was considered the person "who did most of the interacting during that particular activity," while in the fall, the emphasis was changed to the person who initiated most of the activity. The instrument change was made for the fall in order to obtain additional data regarding the initiator of activities. An example of a home visit activity is given below to illustrate how differently the activity was observed and recorded in the spring and fall, affecting the home visit profiles not only in terms of dominance but major interaction patterns as well.

> EXAMPLE: The home visitor is taking out some materials to show to the parent. It is a game that will help the child to identify different colors, but also will help her to learn to count. The home visitor shows the materials to the focal parent and explains the game to her. The game consists of a number of circles with different colors. The home visitor explains the importance of doing the game with the child from time to time so that she will learn her colors and how to count.
>
> After explaining the game to the focal parent for about three minutes, the home visitor turns to the child and asks the child to find a yellow circle. When the child has found one, the home visitor tells her to find others of the same color and to count them. When the child is finished, the home visitor turns to the focal parent and encourages her to continue the game with the child. The parent and child are involved in the game for about seven minutes, while the home visitor primarily listens and watches. During the teaching part with the child, the parent was primarily making requests of the child, while the child was doing (taking the shapes out of the box and counting them).

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[1] Appendix B addresses the reliability of the Home Visit Observation Instrument. A copy of the Home Visit Observation Instruction Manual is included in Appendix C.

The activity would have been observed and recorded as follows during the spring and fall data collection efforts:

	Spring (Interactor)	Fall (Initiator)
DOMINANT INTERACTOR/ INITIATOR	Focal Parent During the activity, the focal parent was the most "active/ dominant" person, doing most of the asking and telling.	Home Visitor The activity was clearly "initiated" by the home visitor although she spent most of the time listening and watching the focal parent and child do the game. There was no initiation on the part of the parent or child since their activities were done at the initiation/ request of the home visitor.
MAJOR INTERACTION PATTERN	Focal Parent to Child The focal parent and child were interacting most of the time during the activity, although there also was some interaction between the home visitor and the parent, and the home visitor and the child.	Home Visitor to Parent or Home Visitor to Parent and Child The activity was "initiated" by the home visitor with the focal parent. Some community interviewers may have regarded this as three-way interaction on the part of the home visitor since the home visitor also initiated the game with the child.
PRIMARY MODES:		
-Home Visitor	primarily "passive" (listening and watching most of the time)	same as in the spring
-Focal Parent	primarily "active" (asking the child to do something most of the time)	same as in the spring
-Focal Child	primarily "active" (doing the game most of the time)	same as in the spring
CONTENT AREAS:		
-Major Content	School Readiness	same as in the spring
-Minor Content	Training the Parent in Child Education	same as in the spring

The primary modes of the three participants in this example are indicative of the major interaction pattern checked in the spring. The two persons shown in a primarily "active" mode also are the two persons between whom most of the interaction took place. Although the minor content area (Training the Parent in Child Education) checked in the spring indicates that there was some activity between the focal parent and the home visitor, it does not show whether it was the parent or the home visitor who initiated the activity. The fall data indicates what percentage of the time the home visitor is "in control" of the home visit, carrying out activities which she has planned in advance or feels she needs to cover. It also indicates how frequently a home visitor takes a more "unstructured" approach, encouraging other participants in the home visit to suggest and/or initiate activities.

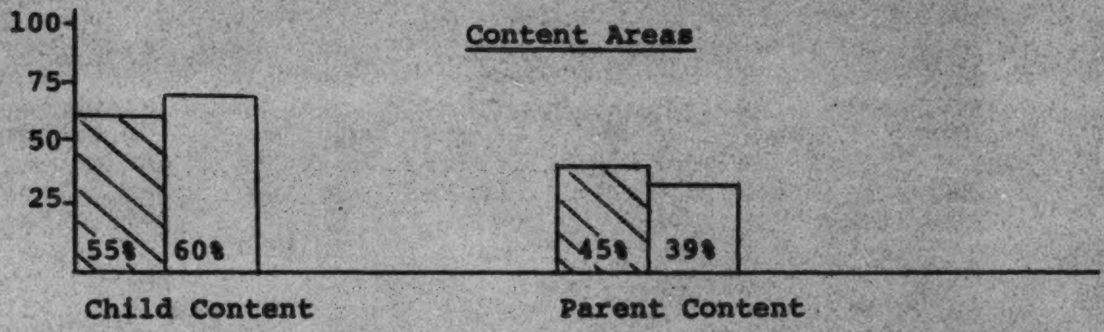
Given these changes in the instrument, it could be expected that the home visitor would be seen as the "initiator" more than she had been seen as the dominant interactor in the spring since she often initiates activities, even if she does not do most of the interacting. The data show this is true: the home visitor was seen as the initiator 82% of the time in the fall, compared to being seen as dominant 46% of the time in the spring.

The data also show several significant differences between the two data-collection points in terms of major interaction patterns; these, too, are at least partially explained by the instrument change. Most marked was the degree of parent-child interaction, which decreased from 13 to 6% of the home visit. Figure V-1 contains comparative figures for dominant interactor/initiator, major interaction patterns and content areas.

Two areas of the Home Visit Observation Instrument which did not change are the activity modes and the content areas. As is shown in Table V-1, two of the home visitor's activity modes changed significantly; the amount of time the home visitor spent telling and doing rose from 55% to 65% ($t= -3.15$: $p < .01$), while the portion of the time she spent listening and watching dropped from 25% to 15% ($t=3.66$: $p < .001$). Parent and child activity modes did not change significantly. This change in home visitor activity modes may be indicative of a shift in the emphasis of the home visit toward the home visitor being more aggressive and in control. If this trend continues through the next data collection, the question of why home visitors' techniques have changed should be addressed. It had been suggested by site staff that spring to fall changes in the home visit profile might be due to new families entering the program. This hypothesis was not substantiated, as reported in more detail in the next section, as there were no significant differences between home visits with new and old families. The content orientation of the home visit shows little change from the spring except for a decrease in the amount of time spent on teaching the parent to teach the child, from 12% of the home visit time to 9% ($t=2.27$: $p < .05$).

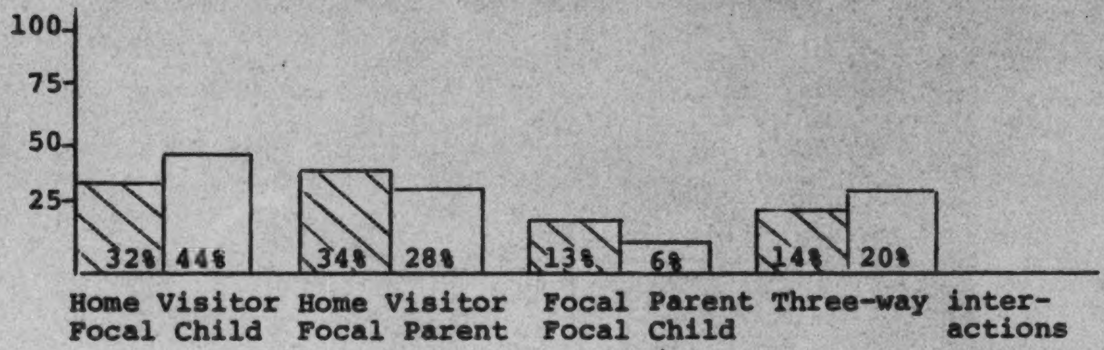
FIGURE V-1: COMPARISON OF SPRING AND FALL HOME VISIT OBSERVATIONS

Areas Not Affected by Instrument Change


Content Areas

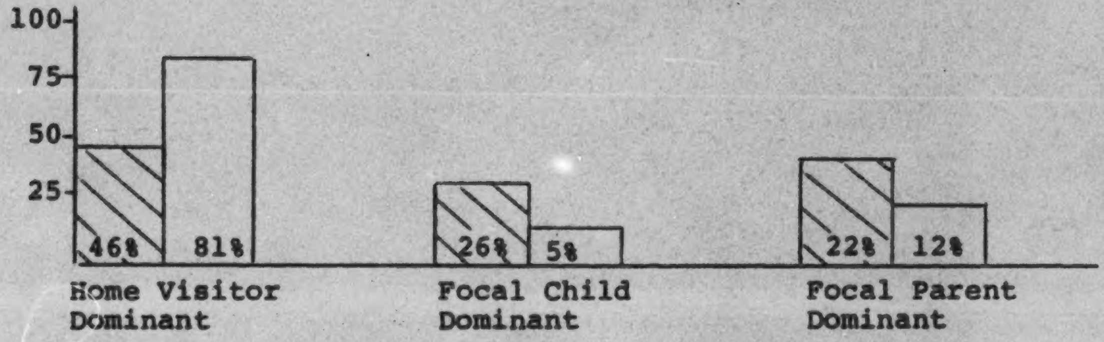
Areas Affected by Instrument Change

Major Interaction Pattern



Areas Affected by Instrument Change

Dominant Interactor/Initiator



▨ = Spring 1974 data ☐ = Fall 1974 data

Although there are no marked differences in across-site averages in content emphasis during the home visit, some differences do show up on a site-by-site basis (see Table V-2). Four of the six sites showed some increase in the time spent on parent content areas; only Ohio and West Virginia showed a decrease. The change in Texas is most notable; in the spring, almost 80% of the home visit in Texas dealt with child content areas, a figure much higher than that in other sites. In the fall, child content took up 60% of the home visit, indicating a shift in emphasis from the child to the parent, at least in terms of topics covered during the visit. Since two comparable measures will be available, we will examine these shifts in content emphasis in the spring, along with comparisons of the initiator/dominant interaction section of the instrument.

Summary

Because of basic changes in the Home Visit Observation Instrument, it is impossible to report any differences in the home visit which would reflect on the relative parent vs. child focus which has been a major topic of discussion in past Interim Reports. The data which are comparable between spring and fall of 1974 indicate that relative emphasis on parent and child content has remained fairly constant, while the home visitor appears to be more active than during the spring. Data collection in spring 1975 with the new instrument will allow us to better ascertain changes in home visit focus, as well as to investigate what additional insight data on the initiation of home visit activities provide.

- What effect do home visitors' background and the amount of time home visitors have worked with families have on the characteristics of the home visit?

In the past, both home visitors' backgrounds and the amount of time a family and home visitor have been working together have been mentioned as possible influences on home visit characteristics. In *Interim Report III* (November 1973), the home visit was described as child-oriented and a recommendation was included that more emphasis be placed on the parent. Some staff felt that the child focus reflected the fact that they had just started to work with the families and were concentrating on establishing rapport. If this were true, one would expect to find differences between home visits conducted with families who have been in Home Start for a while and those who are new to the program. A comparison of data for summative families who have been in Home Start for over a year and those former control families who had just recently entered the program does not support this hypothesis. The only significant difference between home visits with old and new families is in the length of the home visit; home visits with new families last an average of 84 minutes, while those with old families are about 70 minutes long ($t=2.51$: $p < .02$). The percent of time spent in all other dimensions of the home visit measured by the Observation Instrument is similar for old and new families.

A related hypothesis is that the length of time a home visitor and family have been working together affects home visit characteristics, regardless of the length of time the family has been in Home Start.[1] To investigate this possibility, an analysis was done comparing home visits of families who had worked with their current home visitor for three months or less and those who had been visited by the same home visitor for eight months or more.[2] Again, the only significant difference was in visit length -- 84 minutes for new families as compared to 67 minutes for old ones. ($t=3.4$: $p<.01$).

The effect of the home visitor's background on the home visit has also been a question. Local projects encourage their home visitors to take relevant courses which might help them in planning their home visits. Previous reports have questioned the importance of the home visitor's age in the home visitor-focal parent relationship. Analysis of the effects of these variables on the relative amounts of time spent in each content area during the home visit yielded very few results. The potential explanatory variables were home visitor age, home visitor education, her length of time with Home Start, whether or not she had a child, and whether or not she had ever taken courses in health, nutrition, preschool education and psychological or social services. The only instance in which a clear relationship emerged was the amount of time spent on teaching the parent to teach the child. Multiple regression analysis was used to examine the dependence of time spent teaching on parent educational skills on both the home visitor's age and the length of time she has been working in Home Start. These two variables explained 31% of the variance in time spent on child education ($F=5.8$: $p<.01$); the longer a home visitor works in Home Start, the more time she spends in this content area. ($t=3.4$: $p<.01$) A variation of a year in Home Start experience corresponds to a difference of two minutes spent on teaching the parent to teach the child, a content area which accounts for an average of six minutes per home visit. This finding is reasonable since, as a home visitor becomes more accustomed to working with the stated goals of Home Start, she should become more effective in implementing them. As a home visitor becomes older, however, she tends to spend less time on educating the parent about the child ($t=2.5$: $p<.02$). In this case, a variation of two minutes' time spent on this topic corresponds to an age difference of ten years. This finding coincides with reports from site staff of some older home visitors who adopt a "grandmotherly" attitude toward the Home Start family and focus most of their attention on the child.

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[1] Families sometimes change home visitors during their time in Home Start.

[2] No families fell in the intermediate range.

Summary

Neither home visitor background characteristics or the length of time home visitor and family have worked together has much effect on the nature of the home visit. The newness of the home visitor-family relationship does not appear to be an explanation for child focus, as was hypothesized earlier in the Home Start Program. Summative results in the last Interim Report indicated that home visitor background characteristics had no effect on child outcomes; coupled with our finding that the home visitor's background does not affect the home visit itself in any major way, this result suggests that there are no particular educational or demographic characteristics which should be preferred in hiring home visitors.

- **Is there any variation in family treatment across and within projects?**

Home Visiting Records which were completed by home visitors to obtain information about the actual number of home visits and other Home Start activities summative families participated in were used to determine the extent to which family treatment varies by site and by home visitor. Since data were obtained only for a seven-week period[1] that coincided with the testing of summative families, it is likely that the treatment profiles presented here are not typical. The next Home Start report will update the findings presented in this section, based on additional Home Visiting Records which will be completed weekly until the Home Start Demonstration program ends.

The Number of Home Visits

As earlier findings in this report indicated, the home visitor usually visits each of her families weekly. There are some interruptions in the weekly home visiting schedules, however, as the result of staff or family vacations, special staff training sessions, holidays, and emergencies or illness. Due to interruptions in regular program activities caused by the summative testing of families, it can be assumed that families were not visited a maximum of two weeks during this period (if the two testing sessions took the place of the regular home visit). Self-report data show, however, that about a third of the summative families[2] missed more than two home visits.

During this period, home visitors made an average of 4.8 visits to each of their families. These visits lasted for about an hour and a half. Data regarding the number of visits made per family showed considerable variations in the six summative projects. The site profiles are presented in Figure V-2.

Kansas home visitors visited their families once every three weeks during this period -- an average of 2.2 visits per family -- while home visits in Texas-Houston took place every week. The reason why home visitors in Kansas made so few home visits to their families was a shift in the emphasis of project activities, resulting in a decrease in the number of home visits made and an increase of group meetings for focal parents and children and trips to social service agencies (doctor, dentist, etc.). An increase in home visits per family is expected during subsequent reporting periods since this shift of emphasis is only temporary.

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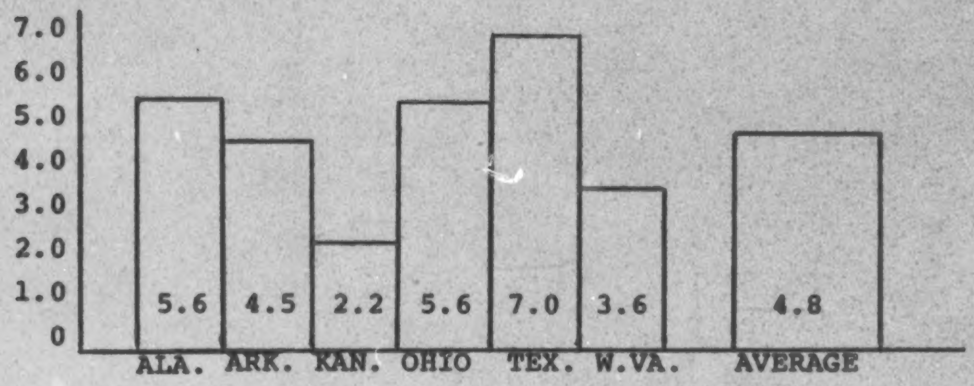
[1] The seven-week period starting on October 1 and ending on November 16, 1974.

[2] Data were obtained on 95% of the summative test sample.

FIGURE V-2

AVERAGE # OF HOME VISITS MADE WITH EACH FAMILY OVER SEVEN-WEEK PERIOD



In addition to across-site differences, the treatment of families varies considerably within projects. Figure V-3 shows the average number of home visits made per family for the six summative projects, indicating home visiting profiles for each of the home visitors. About a third of the home visitors visited with their families between six and seven times during the seven-week period, one third of the home visitors between four and six times, and one third between one and four times. Half of the home visitors made five or fewer home visits per family during the seven week period.

FIGURE V-3

HOME VISITOR PROFILE SHOWING AVERAGE NUMBER OF VISITS MADE PER FAMILY DURING 7-WEEK PERIOD

	Ala.	Ark.	Kan.	Ohio[1]	Texas[2]	W.Va.	Total	%
0 - 1.0 home visits		1	1				2	5%
1.1 - 2.0 " "			3			4	7	11%
2.1 - 3.0 " "			1			4	5	7%
3.1 - 4.0 " "		1	1	1		3	6	11%
4.1 - 5.0 " "	1	1	1		2	1	6	14%
5.1 - 6.0 " "	3			1	1	3	8	18%
6.1 - 7.0 " "	2	4		4	2	1	13	32%
7.1 - 8.0 " "								
9.1 -10.0 " "					1		1	3%
Total number of Home Visitors	6	7	7	6	6	16	48	-

Home visitors in general do not follow a consistent home visiting pattern with each of their families in terms of the number of home visits that are made, the total time they spent with the family during the reporting period, and the average length of the home visit. For example, one home visitor made six visits to most of her families, but five and seven to some others. She spent from 96 to 100 minutes on the home visit with most of her families, some lasting from 91 to 95 and others from 111 to 115 minutes. For families who were visited six times during the seven-week period, the total time spent with each family ranged from 9 to 10.5 hours.

Home visits are not made consistently to all families assigned to a home visitor because circumstances such as illness or other emergencies force the family to cancel the visit. The variation in the length can be explained by the overall nature of the home visit -- some days the visit stretches beyond the originally planned time because the focal parent or child needs special attention from the home visitor.

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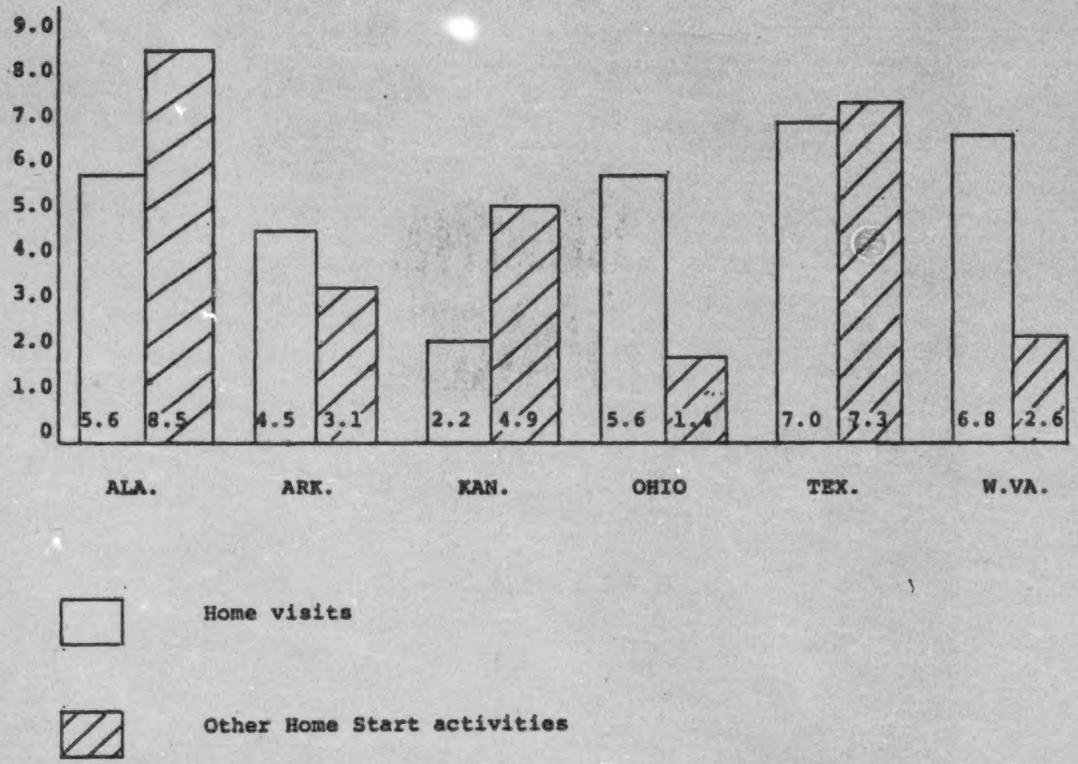
[1] Information is shown here for only six of the eight home visitors employed by the project. No data were received from two of the home visitors.

[2] Data were received from only six of the seven home visitors. The one home visitor on whom no data is available does not have any summative families in the evaluation since most of her families are Spanish-speaking.

As is the case with home visits, variations also occur across and within sites with other activities in which the family participates. As shown in Figure V-5, the average number of other activities the family participated in exceeded the number of home visits made in Alabama, Kansas and Texas.

FIGURE V-5

AVERAGE NUMBER OF HOME VISITS AND OTHER ACTIVITIES PER FAMILY DURING SEVEN-WEEK PERIOD



The types of other Home Start activities families participated in is presented in Table V-3 for each of the six summative projects.

Summary: Although the data presented are based on a seven-week period only, it is clear that there is considerable variation in the number of home visits and other activities families participate in across and within projects, as well as within home visitor caseloads. In addition to receiving 4.8 home visits, families participated in five other Home Start activities during the seven-week period. Additional information regarding Home Start activities will continue to be collected for the next two quarterly reporting periods so that the treatment profile can be verified and updated. In the next report, an attempt will be made to determine the effects of different treatment patterns on parent and child outcome. Also addressed will be the issue of why home visiting patterns are not more consistent within projects and the reasons why the projects have selected specific treatment models. The data also will be used to determine the accuracy of our estimates regarding the length of the Home Start program year and whether it is realistic to expect home visitors to make 34 regular visits with each family during the year.

VI

HOME START COSTS

Most resources utilized by the local projects come directly from the Office of Child Development. Levered resources, consisting of goods and labor services contributed by local government agencies and private sources, plus direct funding from other Federal sources make up the total resource cost of the Home Start projects. For this report information is presented for the full year October 1, 1973 to September 30, 1974, thereby affording a more accurate picture of resource costs with which to balance the achievements reported later in this volume. These resource costs were:

- $606,451 in total OCD expenditures for the six summative projects;
- $65,950 of other Federal monies which was spent by two of the six projects: West Virginia, $59,623 and Ohio, $6,327;
- $177,860 in levered resources for the same period;
- $850,261 for the six summative Home Start projects.

For more detailed information about personnel and non-personnel costs, see Figure VI-1 and the supplementary tables which appear on pages 118 through 122.

The percentage distribution of expenditures of Federal funds across budget categories indicates that the Home Start Program, like most social service programs, is highly labor intensive (see Figure VI-2). Salaries, wages and fringe benefits for project staff account for 80% of the average local project's expenditures. Within this 80%, roughly half of the personnel costs were allocated for home visitors' salaries. Travel expenses and consumable supplies were the most important non-personnel costs with 8% for travel and 4% for consumables.

Levered resources ($177,860), which were approximately 25% of the remaining resources, consisted of goods and labor services contributed by local government agencies (e.g., medical examinations provided by local county health departments) or by private organizations and individuals (e.g., donated office space, psychological evaluations by private therapists, food and clothing). Donated professional time accounted for most of the donated services. Durable materials consisted mostly of space and was the next most important levered resource.

FIGURE VI-1

SIX SUMMATIVE PROJECTS: TOTAL FEDERAL EXPENDITURES
(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas Houston	West Virginia
Total Personnel Costs	75,268	81,700	60,718	101,096	79,800	136,342
Total Non-Personnel Costs	19,394	22,170	23,676	7,603	18,695	45,939
Total Costs	94,662	103,870	84,394	108,699	98,495	182,281

SIX SUMMATIVE PROJECTS: TOTAL RESOURCE COSTS
(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas Houston	West Virginia
Total Personnel Costs	106,311	101,109	66,183	114,510	92,235	161,905
Total Non-Personnel Costs	23,443	34,775	34,536	18,761	28,132	68,361
Total Costs	129,754	135,884	100,719	133,271	120,367	230,266

FIGURE VI-2

(AVERAGE) PERCENTAGE ALLOCATION OF FEDERAL FUNDS ACROSS BUDGET CATEGORIES

(October 1, 1973 to September 30, 1974)

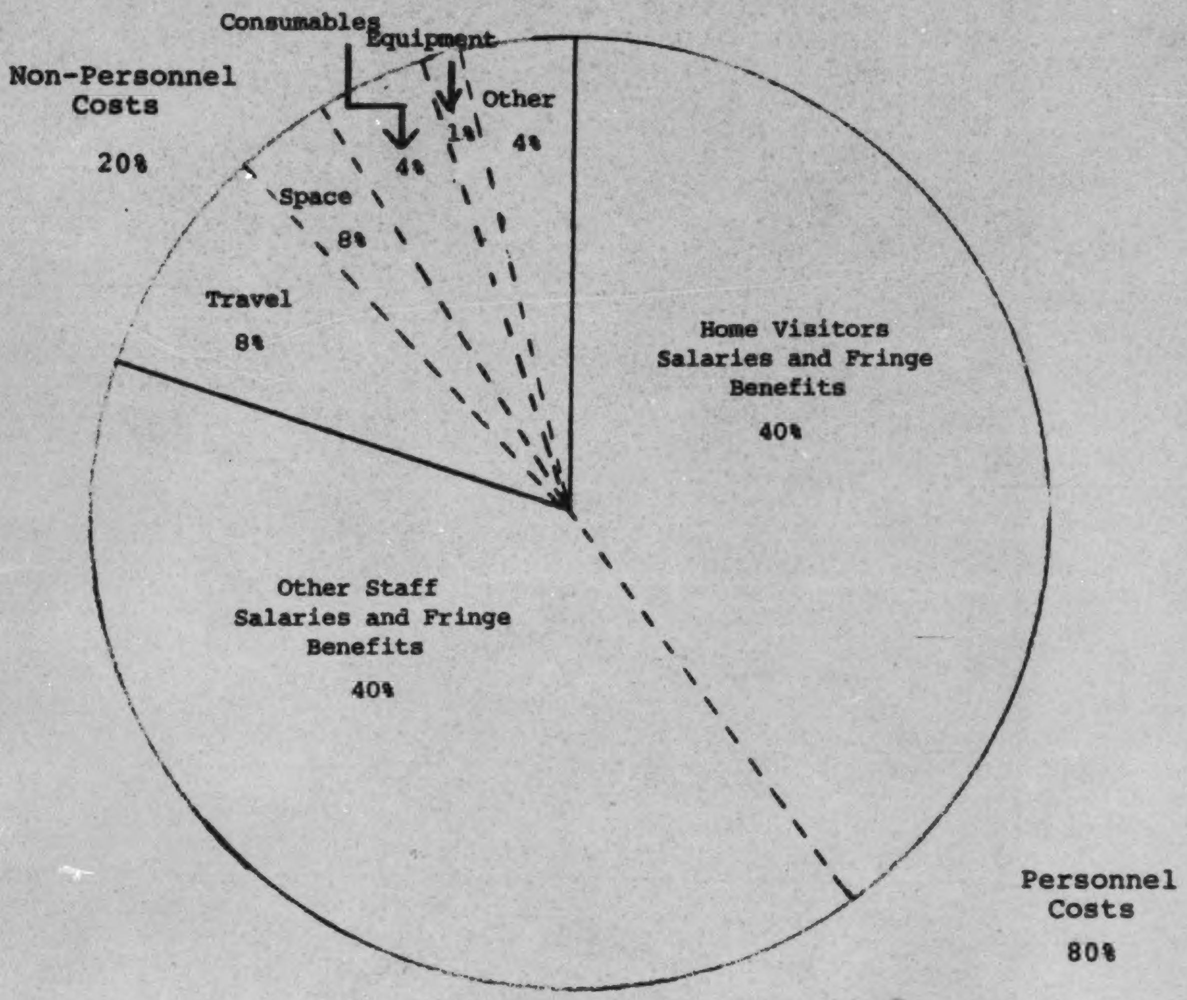


Figure VI-3 illustrates the allocation of total resources across budget categories, and reflects the mostly non-personnel distribution of levered resources as discussed above.

If the costs of all six projects were totaled together to arrive at an average expenditure per project, the number would be far larger than the amounts actually spent. This is due to the amount of extra money made available to the West Virginia project through the OEO grant and an exceptionally larger amount of levered resources. When West Virginia's budget is averaged in with the other five projects, it skews the average. If the West Virginia project is excluded from the calculation, the average budget is $98,024 for federal funds and $25,975 worth of levered resources for an average total of $123,999. These figures are much closer to what was actually spent by the other five projects -- Alabama, Arkansas, Kansas, Ohio and Texas-Houston.

There is a substantial variation in the relative importance that local projects place on certain types of budget items. Several reasons account for these variations in cost and expenditure patterns across the six local projects. Differences in the number of families served account for a sizeable part of the variation in overall budgets. In addition, the availability of community resources in the public and private sectors is an important determinant of the amount of contributed resources which local projects capture.

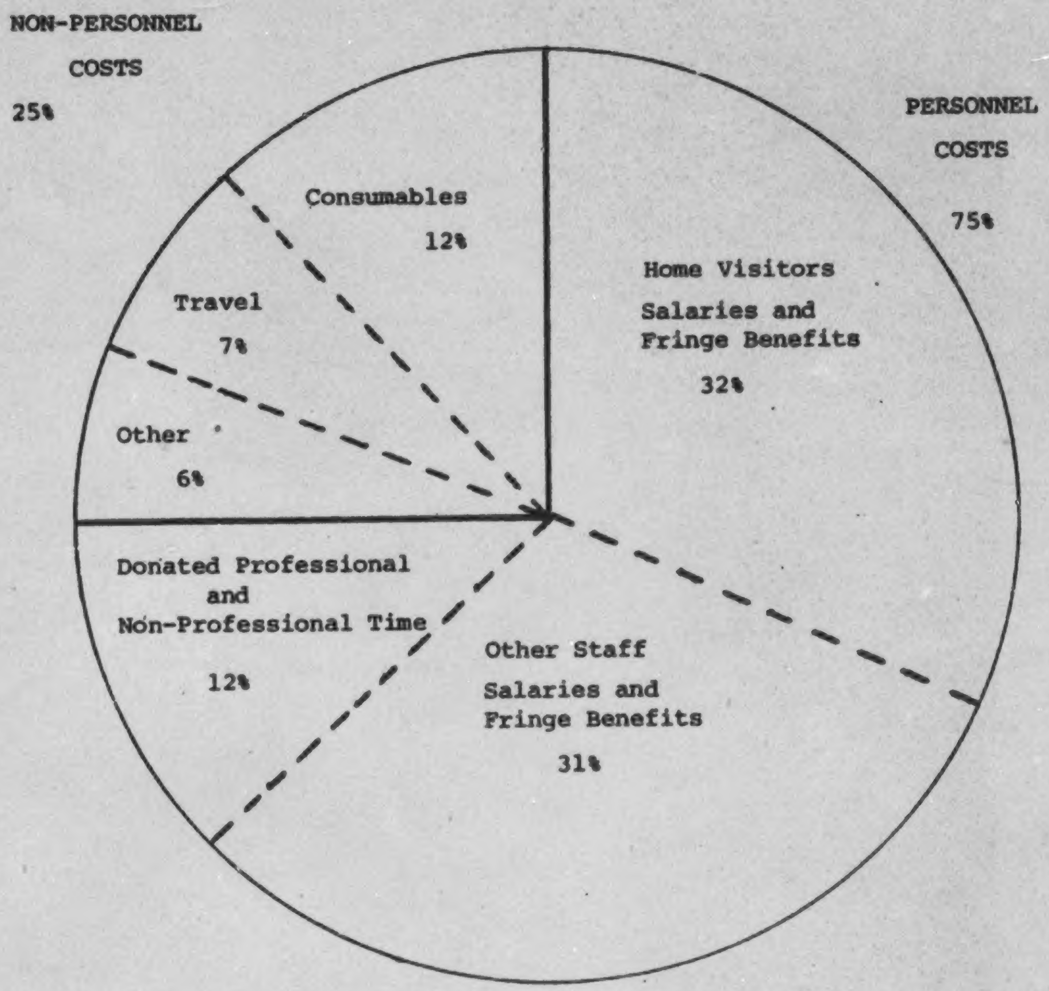
The local project administration determines the resource mix which will best serve the needs of the project's client families. These administrative judgments are a critical determinant of intra-budget allocation patterns. The fact that there are several distinct patterns of resource allocation suggests that alternative service models are being used in different projects. A high ratio of administrative staff to home visitor staff should result in more intensive training and supervision of home visitors and greater success in obtaining community contributions that would occur where this ratio is low. Variations in the specialists/home visitor ratio should result in variations in the special services received by project families (medical, dental and psychological services, job counseling and legal aid) and in variations in the specialized training received by home visitors. How resources are allocated with a local project's budget clearly will be affected by the type of service model the project has chosen to use.

Another cause of the variations in intra-budget spending patterns is site-to-site variation in salary scales. Salaries of home visitors and project administrators differ substantially from one site to another. A part of this difference is the result of regional variations in the cost of labor. This, however,

FIGURE VI-3

PERCENTAGE ALLOCATION OF TOTAL RESOURCES ACROSS BUDGET CATEGORIES

(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)



1. "Other" category includes: Space: 2%
   Equipment: 1%
   Other: 3%

2. Donated Professional Time: 10%
   Donated Non-Professional Time: 2%

is not the only determinant of site-to-site differences in salary scales. Another difference may be that some of the local projects pay higher scales because they hire more experienced, more educated and therefore more costly staff.

Figure VI-4 presents estimates of Federal expenditures per family and total resource cost per family for the six summative projects. For the October 1, 1973 to September 30, 1974 period, average Federal expenditure per family is $1,318 and average total resource value per family is $1,661. As shown in the last report, site-to-site differences are large enough to suggest that families served by low cost-per-family projects are receiving substantially smaller in-kind income transfers via the Home Start program than families served by higher cost-per-family projects.

FIGURE VI-4

UNIT COSTS: FEDERAL EXPENDITURES AND TOTAL RESOURCE VALUE PER FAMILY

(10/1/73 to 9/30/74)

Site	Total Families	Federal Cost Per Family	Total Resource Value per Family
Alabama	83	$1,141	$1,563
Arkansas	83	1,251	1,637
Kansas	76	1,114	1,325
Ohio	70	1,553	1,904
Texas-H	64	1,539	1,881
W. Virginia	139	1,311	1,657
Average - Six Summative Programs	86	$1,318	$1,661

Summary

Total Federal expenditures for the six summative Home Start projects were $672,401. The value of all resources consumed by the project was $850,261 of which roughly 25% was in the form of contributions from local government agencies or private organizations and individuals. Personnel costs represented approximately 80% of the average local projects' costs. Unit costs were $1,318 (Federal) and $1,661 (total resource value) per family per year. If these figures are multiplied by 80 families (target enrollment specified by the original Home Start guidelines), projects would spend $105,440 of Federal monies and $132,880 of total resource monies annually.

VII

IMPLICATIONS OF PRELIMINARY STUDY FINDINGS FOR FUTURE HOME-BASED PROGRAMS

As the Home Start Demonstration Program draws to a close this summer, it is important to ask whether future projects will be able to replicate its achievements, particularly since most of them will be operating as home-based options to Head Start centers under the Innovation and Improvement Program. The feasibility and conditions for replication will continue to be addressed until the final evaluation study findings have been reported.

As was reported in Interim Report V, the findings of the National Home Start Evaluation Study show that Home Start has been successful in the areas of training parents ad educators, child cognitive growth, and the expansion of families' use of other social services. While the National Home Start Demonstration Program has been able to achieve most of the objectives specified in the guidelines, it is not clear how successful future home-based projects will be in terms of achieving parent and child benefits. It is therefore imperative to underline that successes of the Home Start Demonstration will not automatically ensure the success of the home-based option. Two factors which make it difficult to predict the outcome of future home-based programs based on the Home Start experiences are: (1) future home-based options will most certainly not have the benefit of the same kind of focused and committed OCD Washington presence initiating, shaping and providing continuing guidance; and (2) future programs may choose to implement different program models on which no data indicating cost and program effectiveness are currently available.

Leadership at the national level is a critical factor in the success of any Federal human service program. This has certainly been the case with the National Home Start Demonstration Program. After the Home Start Program was conceived by Dr. Edward Zigler in 1971 and funds had been allocated for it, the National Office staff implemented the program in a ten-month period. After shaping the program in its early stages, the same National Office staff have continued to play an active role in program operations through a variety of strategies including: (1) periodic project evaluations to determine the extent to which projects were implementing the National Program objectives (these evaluations were translated into technical assistance providing feedback and suggestions for improvement in management, service delivery and the overall maintenance of project congruity with the original Home Start "idea" as embodied in the Guidelines); (2) the provision of technical assistance and training based on site reports and findings from the National Home Start Evaluation Study; (3) frequent telephone and on-site communications with the projects; (4) distribution of numerous materials of interest to home-based projects; and (5) several national meetings that have dramatized the unitary nature of the program. The National Office staff also played a crucial role in developing and implementing the Home Start Guidelines.

Without this kind of intensive support provided by the National Office, future home-based projects will find it exceedingly difficult to determine the extent to which they are meeting the national program objectives and what modifications in program operations they should make to increase effectiveness. The Home Start Guidelines, for example, while concisely stating goals, do not provide achievement indicators which would aid projects in self-evaluation efforts. A rewriting of the Guidelines to identify specific objectives with the means for evaluating the degree to which they have been achieved may be required to enhance the possibility of success of future home-based projects.

One consequence of a strong National Office has been a surprising uniformity of program implementation. Although the Guidelines leave ample room for individual interpretation, the six summative projects are programmatically very homogeneous. The evidence indicates equal similarity for the ten non-summative Home Start projects. Since the minor variations that do exist were not "planned", it has not been possible to obtain data on the effect of program variations on outcomes. Variations (along the following program dimensions) should be taken into account in the planning stages of future home-based projects, since they might well affect both their cost and their impact on families.

Much discussion in this report has centered on the amount and type of treatment families receive in terms of the length and frequency of home visit, the continuation of activities through the summer, and the inclusion of group activities. Currently most families receive a home visit lasting about an hour and a half each week. While there is some evidence that home visits much shorter than this are not as effective, there is little information on the effect of different home visit schedules. Modifying the length and frequency of the home visit has obvious cost implications; its program implications are not at all clear.

The projects' treatment of summer activities was addressed in this report. Curtailing operations during the summer may be more cost-effective since school and staff vacations interrupt the home visiting schedule. No data are currently available about outcomes associated with this program variation, although it substantially affects the per family cost of providing Home Start services.

Another dimension along which future projects may differ from each other and the Home Start model is the mix of group and individual activities. This aspect is especially crucial when home-based options are added to current Head Start and other center-based programs. While Home Start is primarily a home-based program, this report has pointed out that group activities such as parent meetings and field trips play an important part. Future projects may include different amounts and types of group activities involving parents, children, or both to supplement home visits.

Variations between projects do exist in a few areas not directly related to family treatment. However, these differences were not planned, but resulted instead from individual projects' outlooks and resources. Thus, there are no data on the effects of these variations, although they clearly could affect both cost and program effectiveness. For example, the quality and quantity of training vary from project to project. Different training models may exist in future home-based programs; in particular, in those projects which are associated with Head Start centers, the training may concentrate on very different areas. Although it is crucial to minimize the number of hours devoted to training without decreasing the effectiveness of the home visitors, the Home Start experience cannot really address the question of the optimal amount of time projects should spend on training.

Projects also show considerable variation in the composition of their staffs, from skeleton staffs of one administrator to those containing several specialists. Aside from the recommendation made in Interim Report V that each staff contain one person responsible for the continued supervision of home visitors, no cost-effectiveness analysis of staff compositon has been possible.

To date the program analyses presented in various Interim Reports have concentrated primarily on reporting facts about the operation of the Home Start projects both to provide a context for summative evaluation findings and to enable the National Office to assist projects in their operational development. At this time, however, a number of issues are emerging which may have implications for the success of future home-based programs. The purpose of this latest Program Analysis effort has been to address some of these issues before the final data collection from the sixteen Home Start projects this spring.

The discussion presented in this chapter has formulated three salient questions that we believe need to continue to be addressed:

1. To what extent can the success of the Home Start Demonstration be assumed to be replicated in the home-based option? (We cannot generalize from our current research data.)

2. What is the most appropriate role, form, organization and delivery of OCD policies (the Guidelines) and services to the home-based options?

3. How can OCD systematically allow or perhaps even initiate, program variations that will test other Home Start program implementation approaches, that could well be more effective at equal or lower cost than the current Home Start model?

During the final months of the Home Start Evaluation, these and other issues will be examined further so that recommendations can be made which effectively link the evaluation results of the Home Start Demonstration to future home-based programs.

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NATIONAL HOME START EVALUATION

Interim Report VI:

Part B: Summative Evaluation Results

June 30, 1975

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VIII

INTRODUCTION TO SUMMATIVE RESULTS

Purpose of the Fall 1974 Summative Evaluation

Two questions about the effectiveness of the Home Start program are examined in this part of the report using fall 1973 and fall 1974 change data:

- Have Home Start families surpassed control families in achieving program goals during the first twelve months?
- Have Home Start families kept pace with Head Start families in achieving program goals during the first twelve months?

Findings presented in Interim Report V[1] indicated that in several of the program goal areas, but not all of them, the answer to both questions was yes after seven months of program operation. The findings in this report are intended to highlight changes in findings occuring after twelve months of program operation.

In addition to these questions, a third question of an exploratory nature is addressed in Appendix H using fall 1973 and spring 1974 change data.

- What kinds of families benefit most from the Home Start Program?

The intent of this question is to probe for entry criteria over and above the current income eligibility requirements that might be used to direct program services to the families that can benefit most from them. For example, if it were found that young mothers having few children benefited more than older mothers whose childbearing years were nearly complete, it might prove more cost-effective to give priority to the younger mothers when selecting new families for the program.

This chapter presents some background information about the summative evaluation, describing its basic design, measures, and statistical analyses. Chapter IX presents the twelve-month findings organized according to several questions raised by the seven-month findings in the last report. Chapter X examines some issues about the practical meaning of the findings and some of their broader implications.

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[1] Throughout this section, the abbreviated title "Interim Report V" is used to designate the summative volume of that report.

Summative Evaluation Design

The summative evaluation methodology has been described in detail in previous reports, and only a summary overview is presented here.

The data used for findings presented in Chapter IX were collected from 359 families in six[1] of the sixteen Home Start sites operating in the fall of 1974. Data were collected for the first time from an additional 176 families in these same six sites for use in analyses to be presented in the next report; descriptive information about the new families is presented in Appendix G.

Families in the analyses reported here belong to one of three groups: the Home Start group (160 families), the delayed-entry control group (110 families), or the Head Start group (89 families). All families entered the evaluation in fall 1973, when the Home Start and Head Start families entered their respective programs. The delayed-entry control families entered the Home Start program in fall 1974, just prior to collection of the data presented in this report. All 359 families were among the 556 families included in the fall 1973 data collection, reported in Interim Report IV; based on these totals, the attrition rate for the first twelve months of the evaluation has been approximately 36%. Tests for systematic differences between families dropping and those remaining are reported in Appendix D, and basically show that sample attrition appears random. Since originally the Home Start and control families were randomly assigned to their respective groups, the evaluation remains a true experimental design at the end of the first year.

The fall 1973 data serve as a pretest, the spring 1974 data as a seven-month posttest, and the fall 1974 data as a twelve-month posttest. One more data collection will occur, in the spring of 1975, which will be used for a comparison of outcomes for families enrolled eighteen months to outcomes for families enrolled seven months. Comparisons between Home Start and control families are based on data from all six summative sites, but comparisons between Home Start and Head Start families are only based on data from four sites because in the remaining two sites[2] entering Head Start children were a year older than entering Home Start children.

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[1] Huntsville, Alabama; Dardanelle, Arkansas; Wichita, Kansas; Cleveland, Ohio; Houston, Texas; and Parkersburg, West Virginia.

[2] Cleveland, Ohio, and Wichita, Kansas.

Summative Measures

The same eleven measures were administered in fall 1974 as were administered in spring 1974 and fall 1973. They included two children's tests, two child rating scales completed by adults, one mother rating scale completed by the community interviewer, three parent questionnaires, a parent-child interaction measure, and child height and weight. A list of the measures follows:

- Preschool Inventory (PSI)
- Denver Developmental Screening Test (DDST)
- Child 8-Block Task
- Schaefer Behavior Inventory (SBI)
- Pupil Observation Checklist (POCL)
- High/Scope Home Environment Scale (H/S HES)
- Mother Behavior Observation Scale (MBOS)
- Parent Interview
- Child Food Intake Questionnaire
- 8-Block Sort Task
- Height and Weight

Fifty-six variables were derived from these eleven measures for use in assessing program outcomes. The variables have been categorized into nine Home Start goal areas for presenting findings. Five of them are child goal areas:

- School readiness;
- Social-emotional development;
- Physical development;
- Nutrition;
- Medical care.

Four of them are mother[1] goal areas:

- Mother/child relationship;
- Mother as teacher;
- Home materials for child;
- Use of community resources.

Figures VIII-1 and VIII-2 list all the variables included in each goal area, and provide brief descriptions of the variables; more comprehensive descriptions are available in previous reports. Individual items and related item data from each measure are presented in Appendix E to this report. Using Appendix E it is possible to inspect many additional variables for program effects, and readers are encouraged to browse there.

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[1] Although both parents are equally emphasized in the Home Start Guidelines, about 95% of the parent data reported here is from mothers.

FIGURE VIII - 1

CHILD MEASURES
NATIONAL HOME START EVALUATION
FALL 1974

Measure	Type	Respondent
School Readiness		
• Preschool Inventory, a measure of children's achievement in skill areas that are commonly regarded as necessary for success in school;	Test	Child
• DDST[1] Language Scale, a measure of children's ability to understand spoken language and to respond verbally;	Test	Child
• 8-Block Child Task Score, a measure of children's ability to acquire abstract concepts taught by the mother;	Test	Child
• 8-Block Child Talk Score, a measure of how many task related comments children make while mothers teach them to sort four kinds of blocks into groups.	Observation	Coder, from audio tape of Mother & Child
Social-Emotional Development		
• SBI[2] Task Orientation Scale, a measure of children's task involvement and motivation to complete tasks;	Rating Scale	Mother
• SBI Extraversion-Introversion Scale, a measure of children's interest in relating to other people;	Rating Scale	Mother
• SBI Hostility-Tolerance Scale, a measure of children's ability to refrain from emotional outbursts when things don't work out just right;	Rating Scale	Mother
• DDST Personal-Social Scale, a measure of children's ability to dress themselves and to mix with others;	Rating Scale	Mother
• POCL[3] Test Orientation Scale, a measure of children's task involvement while working with the community interviewer;	Rating Scale	Tester
• POCL Sociability Scale, a measure of the level of children's social interaction while working with the community interviewer.	Rating Scale	Tester
Physical Development		
• Height;	Direct Measurement	Tester
• Weight;	Direct Measurement	Tester
• DDST Gross Motor Scale, a measure of children's ability to coordinate movement of the whole body to accomplish a task;	Test	Child
• DDST Fine Motor Scale, a measure of children's ability to perform complex movements with portions of the body.	Test	Child

FIGURE VIII - 1, CONTINUED

CHILD MEASURES

Measure	Type	Respondent
Nutrition -- (Foods eaten by the child during the past day)		
• Milk Group score (milk, cheese, ice cream);	24 Hour Recall	Mother
• Meat Group score (meats, peanut butter, dried beans and peas);	24 Hour Recall	Mother
• Egg Group score (eggs);	24 Hour Recall	Mother
• A-Vegetables score (carrots, squash, sweet potatoes);	24 Hour Recall	Mother
• Citrus Fruits score (oranges, grapefruits, tomatos);	24 Hour Recall	Mother
• Other Vegetables score (potatoes, apples);	24 Hour Recall	Mother
• Breads and Cereals score (breads, cereals, macaroni, rice);	24 Hour Recall	Mother
• Nutrition Total score (sum of previous scores);	24 Hour Recall	Mother
• Vitamins (yes/no).	24 Hour Recall	Mother
Medical Care		
• Immunization Since May, a yes/no score indicating whether children have had DPT, polio, or measles immunizations between Spring 1974 and Fall 1974;	Questionnaire	Mother
• Months Since Last Doctor Visit;	Questionnaire	Mother
• Reason for Last Doctor Visit (checkup or something wrong);	Questionnaire	Mother
• Ever Been to Dentist (yes/no).	Questionnaire	Mother

[1] DDST: Denver Developmental Screening Test
[2] SBI: Schaeffer Behavior Inventory
[3] POCL: Pupil Observation Checklist

FIGURE VIII - 2

PARENT MEASURES
NATIONAL HOME START EVALUATION
FALL 1974

Measure	Type	Respondent
Mother and Child Relationship		
• H/S HES[1] Mother Involvement Scale, a measure of how often mothers spend time with their children in games, pleasant conversation, and other activities children like;	Questionnaire	Mother
• H/S HES Household Tasks Scale, a measure of how often children "help" their mothers with some simple household tasks;	Questionnaire	Mother
• MBOS[2] Supportive Scale, a measure of how often mothers praised or encouraged their children in the presence of the community interviewer;	Observation	Tester
• MBOS Punitive Scale, a measure of how often mothers scolded, threatened, or criticised their children in the presence of the community interviewer.	Observation	Tester
Mother as Teacher		
• H/S HES Mother Teaches Scale, a measure of which elementary reading and writing skills mothers are trying to teach their children;	Questionnaire	Mother
• 8-Block Request Talk, a measure of how fluently mothers attempt to elicit child talk focusing on the relevant block sorting dimensions of height and mark;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Diagnostic, a measure of how many requests the mother makes for talking of the kind likely to get the child to think about the sorting problem (open-ended questions, rather than questions seeking the answer about the specific dimensions);	Observation	Coder, from audio tape of Mother & Child
• 8-Block Talk About, a measure of how frequently mothers talk about the relevant dimensions of the sorting task;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Interactions/Minute, a measure of the average number of times per minute that the conversation shifts from the mother to the child and vice versa;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Mean Length of String, a measure of the average number of uninterrupted mother comments, reflecting the extent to which the mother engages in a monolog;	Observation	Coder, from audio tape of Mother & Child
• 8-Block Feedback, a measure of how frequently mothers react to children's comments or block placements (includes praise and acknowledgement, encouragement, and corrections).	Observation	Coder, from audio tape of Mother & Child

FIGURE VIII - 2 , CONTINUED

PARENT MEASURES

Measure	Type	Respondent
Home Materials for the Child		
• H/S HES Books Scale, a measure of how many children's books are in the home, and how often someone reads stories to the children;	Questionnaire	Mother
• H/S HES Playthings Scale, a measure of how many of some common, ordinary playthings most children like in are in the home.	Questionnaire	Mother
Use of Community Resources		
• Welfare department;	Questionnaire	Mother
• Food Stamps program;	Questionnaire	Mother
• Medicaid;	Questionnaire	Mother
• Food commodities;	Questionnaire	Mother
• Local hospital;	Questionnaire	Mother
• Public health clinic;	Questionnaire	Mother
• Mental health clinic;	Questionnaire	Mother
• Family counseling agencies;	Questionnaire	Mother
• Planned Parenthood;	Questionnaire	Mother
• Day care program;	Questionnaire	Mother
• Recreational programs;	Questionnaire	Mother
• Legal aid program;	Questionnaire	Mother
• Housing authority;	Questionnaire	Mother
• State employment office;	Questionnaire	Mother
• Job training programs.	Questionnaire	Mother
• Organizational Total, a score indicating how many of the following organizations some family member belongs to: parent-teacher's organization; boy scouts, girl scouts, 4-H Club, or other youth groups; church organization or social club; and political organization.	Questionnaire	Mother

[1] H/S HES: High/Scope Home Environment Scale
[2] MBOS: Mother Behavior Observation Scale

Summative Analyses

Basically five categories of statistical analyses were preformed:

- First, the number of families and children, missing data, conditions of testing, and other information needed to assess field data collection quality were compiled. Results of these analyses are described in Appendix D.
- Second, item analyses were performed for individual measures, such as item response distributions, item percent passing, internal consistency reliability (alpha), item-total correlations, and fall-spring item-change analyses. These are described in Appendix E. This information is used to identify problems with the measures as well as to provide basic item descriptive information for each treatment group.
- Third, analyses of whole scores were performed, such as total score means, total score standard deviations, correlations between total scores, and factor analyses of all total scores in the battery. These are described in Appendix F, and provide basic whole score descriptive information for each treatment group.
- Fourth, analyses of covariance on each of the 56 twelve-month posttest variables were performed, using each respective pretest variable as a covariable. First Home Start families were compared to control families, and then to Head Start families. The results of these analyses are presented in Chapter IX and form the heart of the summative outcome analyses.
- Fifth, regression analyses were performed, in which selected parent and child outcomes were predicted using a series of entering parent and child characteristics. Since the respective prescores were included as predictors in each regression equation, these analyses indicate which entering characteristics best predict parent and child gains. Descriptions and basic findings are summarized in Appendix H.

Originally it was predicted that blocking factors for site effects and children's age effects would be needed to increase the precision of the analyses of covariance, but ultimately they were not needed. There were two reasons for this: first, most site and age effects were removed by the covariables, leaving little additional variability due to the blocking factors; secondly, additional statistical precision was unnecessary, since some of the statistically significant differences had only marginal practical significance as it was.

IX

TWELVE-MONTH HOME START OUTCOMES

This chapter examines twelve-month fall 1973 to fall 1974 summative data to see if major conclusions from the seven-month fall-spring data still appear valid. There were basically four major seven-month conclusions, which are summarized in Figure IX-1. The four conclusions are used to organize the presentation of findings in this chapter.

Necessary background descriptions of the evaluation design and measures are presented in Chapter VIII. A discussion of expected program outcomes for each measure was presented in Chapter VI of Interim Report V: Summative Evaluation Results; some of the background information presented there is essential for a full understanding of the current findings, although this chapter is intended to be complete in itself.

With analyses presented in this volume it is possible to answer three different questions about the summative results:

- First, what twelve-month impacts did Home Start have on enrolled families, using control and Head Start families for comparison? The analyses of covariance used to answer this question are presented in Figures IX-2 through IX-5 of this chapter.
- Second, did scores for the three groups increase, decrease, or stay constant over the twelve months? The change analyses used to answer this question for each measure and group are presented in Appendix E.
- Third, on which individual items did most families in each group improve over the twelve months? The item change analyses used to answer this question for each item and group are presented in Appendix E.

The same three kinds of analyses for seven-month data were presented in Interim Report V, so changes from seven to twelve months can be easily identified.

Question 1

- After twelve months of enrollment, do Home Start families still surpass control families in the area of:

Child school readiness?--Yes. The last report showed that after seven months in the program Home Start children scored significantly higher than control children on three out of four school

Figure IX-1

Summary of Major Seven-Month Conclusions from Interim Report V: Summative Evaluation Results

1. Home Start families surpassed control families in six program goal areas:
   - child school readiness;
   - child medical and dental care;
   - mother/child relationship;
   - mother as teacher;
   - home materials for the child;
   - family community involvement.
2. Home Start families did not show any improvement relative to control families in three goal areas where improvement was clearly expected:
   - child nutrition;
   - child immunizations;
   - family use of existing community resources.
3. In two more goal areas Home Start families did not show any improvement relative to the control families, but it is uncertain to what extent such improvements were expected:
   - child social-emotional development;
   - child physical-motor development.
4. Home Start families kept pace with Head Start families in all but three goal areas, suggesting the two programs are generally comparable:
   - child nutrition;
   - child medical care;
   - day care services.

readiness variables: the Preschool Inventory, the DDST Language Scale, and the 8-Block Child Talk Score. After twelve months the Preschool Inventory difference is still statistically significant, but the remaining three failed to reach significance at the 5% level of probability (Table IX-1). The magnitude of the differences between adjusted means for Home Start and control remained about the same from the seven- to the 12-month outcomes, and the F-ratios for PSI and DDST Language are very similar at the two time points (compare Tables VI-1 in Interim Report V). The lack of significance for the 12-month data may be largely a function of the smaller sample since fewer degrees of freedom reduces the power of the F-test to detect a difference of a given size.

When the four school readiness measures are tested simultaneously, using multivariate analysis of covariance, the difference is statistically significant in favor of Home Start children ($F=3.42$; $p<.05$). This supports the conclusion that Home Start children have maintained their advantage over control children in the area of school readiness.

Child medical care?--Yes. Home Start children have maintained their advantage in medical care compared to the control children. Differences on the same three medical care indicators were significant at the 5% level after seven months and after twelve months: months since last doctor visit, percent of children making preventive visits, and percent of children going to a dentist (Table IX-1). The average difference in months since the last doctor visit has widened slightly, with Home Start children having been to the doctor 2.3 months more recently than control children (compared to 1.8 at the time of the seven-month posttest), but the absolute length of time for both groups has lengthened (by a little over a month). The percent of children going for preventive checkups has increased for both groups, but the difference between groups is about the same. There is little change from the large seven-month difference between the proportions of Home Start and control children who had been to the dentist (Table IX-1; Interim Report V, Table VI-1).

Thus Home Start children continue to show the same large differences relative to control children in the frequency of medical care they receive.

Mother/child relationship?--No. Neither of the two mother/child relationship differences that were statistically significant after seven months remained significant after twelve months: H/S HES Mother Involved Scale and the H/S HES Household Tasks Scale (Table IX-2). Worse yet, the twelve month difference on the MBOS Punitive Scale was statistically significant in a direction unfavorable to the Home Start mothers--they tended to scold their children in the presence of testers more often than control mothers did (Table IX-2 , Table E-49). In addition, although the difference on the MBOS Supportive Scale favored Home Start mothers (but not significantly), there was a significant decline over

Table IX-1

TWELVE MONTH HOME START CHILD OUTCOMES: HOME START TO CONTROL
Analysis of Covariance for Fall 1974 Scores,
Using Pretest as the Covariate
(Six Summative Sites Included)

	HOME START			CONTROL						
	N	Fall Mean	Adj. Fall Mean	N	Fall Mean	Adj. Fall Mean	F	p	ω^2	Summa
School Readiness										
Preschool Inventory	119	17.4	17.7	77	15.3	14.9	20.0	<.05	.09	HMS>
DDST Language	137	31.0	31.0	95	30.1	30.3	3.8	NS	.01	
8-Block Child Score	119	5.4	5.3	77	4.7	4.8	3.3	NS	.01	
8-Block Child Talk	141	2.9	2.9	89	2.4	2.4	2.9	NS	.01	
Social-Emotional Development										
SBI Task Orientation[1]	159	19.7	19.7	109	18.6	18.7	4.4	<.05	.01	HMS>
SBI Extra-Introversion	158	22.8	22.9	109	23.2	23.2	< 1	NS	.00	
SBI Hostility Tolerance	157	17.9	17.7	109	19.3	19.6	9.4	<.05	.03	HMS<
POCL Test Orientation	155	25.8	25.8	107	23.4	23.4	8.5	<.05	.03	HMS>
POCL Sociability	158	18.4	18.3	106	16.9	17.0	3.1	NS	.01	
DDST Personal-Social	154	11.2	11.2	106	11.2	11.2	< 1	NS	.00	
Physical Development										
Height (inches)	155	42.1	42.2	106	41.9	41.8	6.3	<.05	.02	HMS>
Weight (pounds)	156	38.3	38.5	108	38.2	37.8	2.5	NS	.01	
DDST Gross Motor	126	12.3	12.3	86	12.3	12.3	< 1	NS	.00	
DDST Fine Motor	155	12.8	12.8	106	12.6	12.6	2.4	NS	.01	
Nutrition										
Milk Group	158	1.4	1.4	108	1.3	1.3	1.4	NS	.00	
Meat Group	158	1.3	1.3	108	1.2	1.2	1.0	NS	.00	
Egg Group	158	.20	.20	108	.22	.22	< 1	NS	.00	
A-Vegetables	158	.10	.10	108	.10	.10	< 1	NS	.00	
Citrus Fruits	158	.34	.34	108	.23	.23	4.2	<.05	.01	HMS>
Other Vegetables	158	1.8	1.8	108	1.7	1.7	< 1	NS	.00	
Breads & Cereals	158	3.4	3.4	108	3.3	3.3	< 1	NS	.00	
Nutrition Total	158	8.5	8.5	108	8.1	8.1	3.1	NS	.01	
Vitamins	141	.38	.38	106	.31	.32	< 1	NS	.00	
Medical Care										
Immunizations since May[3]	159	.30		107	.36		< 1	NS		
Months since Doctor Visit[2]	104	5.7	5.7	63	8.0	8.1	6.8	<.05	.03	HMS<
Checkup/Something Wrong	149	.60	.59	103	.31	.32	19.2	<.05	.07	HMS>
Been to Dentist[3]	150	.89		107	.21		226.6	<.05		HMS>

[1] One item has been dropped from this scale, consequently Fall 1974 scores are lower than Sp
1974 scores presented in Interim Report V, Table VI-1.

[2] Low score is favorable.

[3] Analysis of variance on post scores.

Table IX-2

TWELVE MONTH HOME START MOTHER OUTCOMES: HOME START TO CONTROL
Analysis of Covariance for Fall 1974 Scores
Using Pretest as the Covariate
(Six Summative Sites Included)

	HOME START			CONTROL						
	N	Fall Mean	Adj. Fall Mean	N	Fall Mean	Adj. Fall Mean	F	p	ω^2	Summary
other/Child Relationship										
H/S HES Mother Involvement	156	10.2	10.1	102	10.0	10.1	< 1	NS	.00	
H/S HES Household Tasks	157	3.5	3.5	108	3.2	3.3	< 1	NS	.00	
MBOS Supportive	136	7.3	7.3	107	7.1	7.1	< 1	NS	.00	
MBOS Punitive	144	5.4	5.4	109	5.0	5.0	4.8	<.05	.01	HMS>CNT[1]
other as Teacher										
H/S HES Mother Teaches	159	3.9	3.8	109	3.6	3.6	1.1	NS	.00	
8-Block Request Talk	141	.69	.70	89	.66	.64	< 1	NS	.00	
8-Block Diagnostic	141	1.1	1.1	89	1.1	1.1	< 1	NS	.00	
8-Block Talk About	141	1.3	1.3	89	1.2	1.2	< 1	NS	.00	
8-Block Interactions/min	137	8.5	8.6	80	7.8	7.8	1.4	NS	.00	
8-Block Mean Length String	140	3.7	3.7	83	4.3	4.3	1.3	NS	.00	
8-Block Feedback	141	1.5	1.5	89	1.4	1.4	< 1	NS	.00	
ome Materials for Child										
H/S HES Books	159	4.2	4.2	110	4.0	4.0	1.6	NS	.00	
H/S HES Playthings	159	3.6	3.5	109	2.8	2.9	11.4	<.05	.04	HMS>CNT
se of Community Resources										
Welfare department	152	.41	.40	101	.34	.36	< 1	NS	.00	
Food Stamps Program	152	.51	.51	98	.48	.49	< 1	NS	.00	
Medicaid	153	.25	.23	102	.25	.29	1.4	NS	.00	
Food commodities	150	.01	.01	102	.01	.01	< 1	NS	.00	
Local hospital	144	.78	.79	95	.68	.68	3.8	NS	.01	
Public health clinic	147	.73	.71	101	.64	.66	< 1	NS	.00	
Mental health clinic	158	.06	.05	104	.03	.04	< 1	NS	.00	
Family counseling agencies	156	.03	.02	104	.00	.00	1.8	NS	.00	
Planned Parenthood	154	.29	.27	99	.16	.18	4.0	<.05	.01	HMS>CNT
Day care program	153	.03	.03	103	.07	.07	1.8	NS	.00	
Recreational programs	157	.08	.08	103	.04	.04	1.4	NS	.00	
Legal aid program	155	.05	.04	103	.04	.04	< 1	NS	.00	
Housing authority	157	.21	.20	100	.13	.14	5.1	<.05	.02	HMS>CNT
State employment office	147	.11	.11	98	.10	.10	< 1	NS	.00	
Job training programs	158	.04	.04	106	.02	.02	< 1	NS	.00	
Organization Total	142	5.7	5.7	92	5.6	5.7	< 1	NS	.00	

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[1] Low score is favorable.

Table IX-3

TWELVE MONTH HOME START CHILD OUTCOMES: HOME START TO HEAD START
Analysis of Covariance for Fall 1974 Scores,
Using Pretest as the Covariate
(Four Summative Sites Included)

	HOME START			HEAD START						
	N	Fall Mean	Adj. Fall Mean	N	Fall Mean	Adj. Fall Mean	F	p	ω^2	Summa
School Readiness										
Preschool Inventory	84	18.9	18.7	74	17.4	17.6	2.3	NS	.01	
DDST Language	97	31.7	31.5	78	31.1	31.4	< 1	NS	.00	
8-Block Child Score	85	5.8	5.8	63	5.4	5.4	< 1	NS	.00	
8-Block Child Talk	98	3.1	3.1	80	2.5	2.5	3.0	NS	.01	
Social-Emotional Development										
SBI Task Orientation[1]	111	20.5	20.3	85	19.6	19.8	< 1	NS	.00	
SBI Extra-Introversion	110	22.7	22.8	86	23.3	23.2	< 1	NS	.00	
SBI Hostility Tolerance[2]	109	18.0	18.0	85	18.6	18.6	< 1	NS	.00	
POCL Test Orientation	106	25.7	25.6	86	27.2	27.3	4.4	<.05	.02	HMS<H
POCL Sociability	109	18.4	18.3	86	20.2	20.2	6.2	<.05	.03	HMS<H
DDST Personal-Social	106	11.2	11.2	82	11.2	11.2	< 1	NS	.00	
Physical Development										
Height (inches)	107	42.5	42.6	88	42.3	42.3	1.1	NS	.00	
Weight (pounds)	108	38.9	39.5	88	40.3	39.5	< 1	NS	.00	
DDST Gross Motor	90	12.7	12.7	72	12.4	12.4	1.6	NS	.00	
DDST Fine Motor	108	13.1	13.1	88	13.3	13.4	4.2	<.05	.02	HMS<H
Nutrition										
Milk Group	109	1.5	1.5	82	1.9	1.9	11.4	<.05	.05	HMS<H
Meat Group	109	1.3	1.3	82	1.3	1.3	< 1	NS	.00	
Egg Group	109	.23	.23	82	.25	.26	< 1	NS	.00	
A-Vegetables	109	.12	.11	82	.24	.25	12.8	<.05	.01	HMS<H
Citrus Fruits	109	.29	.29	82	.54	.54	12.4	<.05	.06	HMS<H
Other Vegetables	109	1.8	1.8	82	2.1	2.1	6.0	<.05	.03	HMS<H
Breads & Cereals	109	3.4	3.4	82	3.4	3.4	< 1	NS	.00	
Nutrition Total	109	8.6	8.6	81	9.8	9.7	20.3	<.05	.09	HMS<H
Vitamins	95	.46	.50	80	.38	.34	4.8	<.05	.02	HMS>H
Medical Care										
Immunizations since May[3]	110	.32		89	.45		3.6	NS		
Months since Doctor Visit[2]	68	6.6	6.5	63	4.6	4.7	3.3	NS	.02	
Checkup/Something Wrong	103	.39	.35	86	.43	.47	2.9	NS	.01	
Been to Dentist[3]	102	.94		88	.94		< 1	NS		

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[1] One item has been dropped from this scale, consequently Fall 1974 scores are lower than Sp 1974 scores presented in Interim Report V, Tables VI-3.

[2] Low score is favorable.

[3] Analysis of variance on post scores.

Table IX-4

TWELVE MONTH HOME START MOTHER OUTCOMES: HOME START TO HEAD START
Analysis of Covariance for Fall 1974 Scores,
Using Pretest as the Covariate
(Four Summative Sites Included)

	HOME START			HEAD START						
	N	Fall Mean	Adj. Fall Mean	N	Fall Mean	Adj. Fall Mean	F	p	ω²	Summary
ther/Child Relationship										
H/S HES Mother Involvement	109	10.1	10.2	86	10.1	10.1	< 1	NS	.00	
H/S HES Household Tasks	108	3.6	3.5	87	3.3	3.3	1.8	NS	.00	
MBOS Supportive	97	7.2	7.2	61	7.7	7.7	2.6	NS	.01	
MBOS Punitive	102	5.5	5.5	62	4.8	4.8	10.2	<.05	.05	HMS>HDS[1]
ther as Teacher										
H/S HES Mother Teaches	110	4.0	4.1	88	3.6	3.5	5.0	<.05	.02	HMS>HDS
8-Block Request Talk	98	.70	.69	80	.61	.62	< 1	NS	.00	
8-Block Diagnostic	98	1.1	1.1	80	1.1	1.1	< 1	NS	.00	
8-Block Talk About	98	1.1	1.2	80	1.4	1.3	1.1	NS	.00	
8-Block Interactions/min.	74	8.7	8.6	57	7.8	8.0	< 1	NS	.00	
8-Block Mean Length String	76	3.6	3.7	57	3.7	3.6	< 1	NS	.00	
8-Block Feedback	98	1.3	1.3	80	1.3	1.3	< 1	NS	.00	
me Materials for Child										
H/S HES Books	110	4.2	4.4	88	4.5	4.3	< 1	NS	.00	
H/S HES Playthings	110	3.5	3.6	87	3.5	3.4	1.0	NS	.00	
e of Community Resources										
Welfare department	104	.24	.26	87	.31	.29	< 1	NS	.00	
Food Stamps Program	104	.43	.44	88	.42	.41	< 1	NS	.00	
Medicaid	105	.11	.15	88	.28	.24	4.8	<.05	.02	HMS<HDS
Food commodities										
Local hospital	98	.82	.82	83	.88	.88	1.3	NS	.00	
Public Health Clinic	101	.74	.75	85	.65	.64	2.5	NS	.01	
Mental Health Clinic	109	.06	.07	87	.02	.02	2.3	NS	.01	
Family Counseling agencies										
Planned Parenthood	106	.30	.31	84	.20	.20	4.9	<.05	.02	HMS>HDS
Day care program	105	.02	.09	86	.69	.60	100.0	<.05	.34	HMS<HDS
Recreational programs	108	.10	.11	88	.11	.11	< 1	NS	.00	
Legal Aid program	107	.05	.05	87	.03	.03	< 1	NS	.00	
Housing authority	110	.10	.15	87	.11	.06	6.8	<.05	.03	HMS>HDS
State employment office	100	.15	.15	84	.08	.08	2.0	NS	.01	
Job training programs	109	.03	.03	86	.05	.04	< 1	NS	.00	
Organization Total	100	5.8	5.9	81	6.2	6.0	< 1	NS	.00	

ow score is favorable.

the twelve months in the frequency that Home Start mothers talked proudly about their children to the testers (Table E- 49). Control mothers did not show such a decline.

The negative twelve month outcome on the H/S HES Mother Involved Scale seems attributable to a significant decline for Home Start mothers over the twelve month period, rather than to a significant increase for the control mothers (Table E-42). The H/S HES Household Tasks shift seems equally due to a slight decline for Home Start families since spring and to a slight increase for control families (Table IX-2; Interim Report V, Table VI-2), although both groups gained significantly over the total twelve months (Table E-42). It is difficult to tell from available data to what extent these changes reflect an increase in the honesty with which Home Start mothers replied to the questionnaires compared to control mothers, and to what extent they reflect actual changes in the mother/child relationship.

At least two different explanations seem possible for the negative MBOS findings. First, and perhaps most likely, after twelve months of home visits Home Start mothers may feel more at ease with outsiders than control mothers do and may act more natural towards their children in the tester's presence. If this proved to be the case, it could be interpreted as a mildly positive program outcome. Second, it is possible that the program has increased Home Start mothers' awareness of their children's capabilities, causing them to have higher expectations for their children; this could lead to the higher incidence of scolding in front of the testers when children failed to perform up to the mother's expectations. To the extent this might be true, it would suggest that home visitors should devote more attention to helping Home Start mothers balance their expectations with children's actual capabilities. Unfortunately, the data do not indicate which explanation--whether one of these or another entirely--is most accurate in identifying the underlying causes of the observed outcomes. It is relatively clear, however, that these outcomes are not readily interpretable as favorable to the Home Start program.

Mother as teacher?--Uncertain. Neither the H/S HES Mother Teaches Scale nor any of the 8-Block mother score differences were significant after twelve months (Table IX-2), but these departures from the seven-month findings seem entirely attributable to methodological problems with the evaluation. First of all, the H/S HES Mother Teaches change is not due to any decrease on the part of Home Start mothers, because in fact they reported teaching slightly more to their children after twelve months than they did after seven months (Table IX-2; Interim Report V, Table VI-2): rather, it seems due to the relatively large increase in the number of things control mothers reported teaching to their children from seven to twelve months. When one recalls that the control families are now in the Home Start program, and had been in the program for about a month at the time of the twelve month testing, it is quite possible that the control mothers' increase is an immediate program effect. While this explanation cannot be unambiguously advanced as correct, the H/S HES Mother Teaches Scale seems to be among the few variables that would respond most readily to short term program involvement. Entering mothers could quickly catch the spirit of the program and enthusiastically begin teaching new things to their children, especially if at first they viewed the program primarily in terms of child education.

The lack of 8-Block findings has a more complex explanation, involving two very different methodological problems. The more concrete of the two problems relates to mothers' reactions to carrying out the identical 8-Block Task for the third time (fall 1973, spring 1974, and fall 1974). Many mothers expressed displeasure to the testers about having to go through with the task one more time; they completed the task in less time; and in all likelihood found the task of teaching the block-sorting to their children more trivial, since by now the children were quite experienced in placing the blocks. Both Home Start and control mothers would be equally affected by these problems, and would show improvement simply from completing the task so many times. A multiple posttest evaluation design such as this one clearly would benefit from an "alternate form" of the 8-Block Task--but unfortunately none exists.

The second 8-Block methodological problem relates to the way the scoring methods were developed. The 8-Block mother scores were developed in an exploratory fashion using 1973-74 data. It is ordinarily considered necessary to replicate an analysis procedure with new data before confidence can be put in it, because it is inevitable that some effects occuring by chance in the data will be fit by the scoring model as though they were true effects. Since no additional data administration was possible at the time the final 8-Block scoring system was evolved, it became necessary to risk proceeding with the unreplicated scoring system--but the risk did not appear to pay off, judging from the total lack of findings in the twelve month data.

In summary, although there is no reason to believe the Home Start program has any less impact now on things mothers report teaching their children, or the ways they teach them, serious methodological problems prevent arriving at these conclusions from the current data.

Home materials for the child?--Yes. After twelve months in the program, Home Start mothers reported having significantly more of some common playthings available for their children than control mothers reported having for theirs (Table IX-2), but there was no difference in the number of children's books they reported having available. The apparent change in conclusions about the availability of books from seven to twelve months is attributable to an increase for control families rather than to a decrease for Home Start families. As discussed above for findings on the H/S HES Mother Teaches Scale, it seems reasonable to interpret the increase in availability of children's books in control families to initial program effects occuring during their first month in the program. If the home visitors made an effort to introduce books into the homes right away, if even by lending them from week to week, the program could easily have caused the observed increase in the newly enrolled control families.

In short, although only one of the two differences in home materials for the child remained significant after twelve months, both are interpreted as supporting Home Start's effectiveness because of the likelihood that the control family increase in available children's books resulted from their recent entry into the program.

Family community involvement?--probably not. After twelve months there is no difference between Home Start and control mothers in the number of community organizations they reported that some family member belonged to (Table IX-2). Since Home Start families decreased about as much as control families increased and both changes were slight, there does not appear to be a simple explanation for the seven to twelve-month shift in the conclusion.

Question 2

- After twelve months of enrollment, have Home Start families yet shown any of the expected improvement in the areas of:

Child nutrition?--No. After twelve months there is still no difference between Home Start and control families in the Nutrition Total Score (Table IX-1), nor in most of the nutrition subscores. Scores for both groups have increased slightly, but this is presumably because the children are older and tend to eat more on the average. There is some cause for optimism because of the increasing difference between Home Start and control families on the Nutrition Total, however (Table IX-1; Interim Report V, Table VI-1); the F-ratio is now large enough that it would only take a slight Home Start increase to make the difference statistically significant at the 5% probability level.

In response to the lack of nutrition improvement after seven months reported in Interim Report V, a memo was sent to all Home Start projects from the National Office stressing the seriousness of the problem and the need for increased effort. The twelve-month data reported here had already been collected when the memo was sent, so the effects of the memo cannot appear until eighteen-month data are gathered in spring 1975. Since control families have now entered the Home Start program, they too should benefit from the increased program emphasis on nutrition. This means that group differences are not likely to be significant in spring 1975 even if program effectiveness in nutrition improves considerably; any improvement should, however, become apparent in the absolute levels reached by both groups on the total nutrition score. If the average Nutrition Total Score value exceeds 10.0, then the children can be considered at a generally satisfactory level.

Because of the lack of seven-month findings, additional information was gathered during the fall 1974 site visits to learn more about the level of effort local projects devote to nutrition education, and the kinds of activities they emphasize. The results of this data-gathering effort are reported in Part A of this volume, and seem to suggest that the projects are meeting the program guidelines at a satisfactory level; this raises the question about whether the guidelines are adequate for bringing about the needed improvements in children's diets in view of the overall lack of program impact demonstrated so far.

Child immunizations?--No. The twelve-month program outcome regarding immunizations is somewhat difficult to interpret because a different question was used to obtain child immunization information from mothers in fall 1974 ("Has Jane had any immunizations since May?", compared to the previous question, "Which of the following has Jane received?"). However, responses to the question "Any immunizations since May?", were quite similar for both Home Start and control families (Table IX-1). This does not necessarily mean the program has had no effect, however, because many control children might have received immunizations when they entered Home Start, about a month before these data were collected. Since the proportion of mothers responding "yes" was quite high in both groups (over one-third), this explanation is plausible. After the seven-month findings became available, local projects were urged by the National Office to arrange immunizations for the ten or so percent of children still needing them. The data reported here were gathered before this action took place, however, so any effect due to it cannot become apparent until spring 1975 data collection. By that time the percent of children having all essential immunizations should increase to almost 100% if the program is able to have any effect in this area.

Family use of existing community resources?--No. Although after twelve months there are statistically significant differences in the proportion of Home Start over control mothers using two of the resources (Table IX-2, planned parenthood and housing authority), and an emerging difference in the proportion using local hospitals, in general there is little evidence for overall program effectiveness in this area.

In part, the lack of findings may be due to the methods by which these data were gathered. Because of the lack of seven-month differences, additional information about use of community resources was gathered during fall 1974 site visits, and the results are reported in Part A of this volume. It was found that many community resources other than those included on the summative questionnaire were used by Home Start families, and that only a relatively small proportion of eligible families were not already using medicaid and food stamps. Thus the program's impact in this area may be greater than the data seem to indicate.

Question 3

- After twelve months of enrollment, have Home Start families begun to show emerging improvements in the areas of:

Child social-emotional development?--Yes. After seven months only one of the six child social-emotional differences reached statistical significance (Interim Report V, Table VI-3); after twelve months, three reached statistical significance: SBI Task Orientation, SBI Hostility-Tolerance, and POCL Test Orientation (Table IX-1). All significant differences favored Home Start children. In addition, a fourth difference in favor of Home Start children appears to be emerging on the POCL Sociability Scale, judging by the magnitude of the F-ratio. These differences suggest that both mothers and testers view Home Start children as being able to become more involved in tasks for extended periods of time; that Home Start mothers view their children as being better able to cope with unwanted events than control mothers viewed theirs; and that testers are beginning to view Home Start children as more outgoing in the testing situation than control children are.

These findings support the idea which was tentatively suggested in Interim Report V--that social emotional changes take longer to occur than school readiness changes, and the lack of findings after only seven months did not necessarily mean the Home Start program failed to have any effect in that area. In view of the traditional difficulty evaluators have had measuring social-emotional program impacts, it is most encouraging to find that both mothers and testers view Home Start children differently than control children in terms of social-emotional behavior.

Child physical-motor development?--No. The weight difference observed after seven months between Home Start and control children was dismissed as ambiguous in Interim Report V, because it could not clearly be interpreted as either favorable or unfavorable in the absence of parallel nutrition differences. In retrospect that decision seems right because there is no longer a weight difference after twelve months, suggesting that the observed seven-month difference was a chance event. After twelve months a height difference has emerged (Table IX-1), but this appears just as ambiguous as the seven-month weight differences because there still are no parallel nutrition differences that might be causing it. The height difference should probably be interpreted as a chance event rather than a program effect, although this interpretation can be revised if future data suggest it. One way a chance difference like this might occur is by systematic attrition, see Tables D-8, D-9, and D-11. This possibility will be investigated further using available fall 1973 data.

There were no statistically significant differences between Home Start and control children on either of the two physical-motor scales, although a difference may be emerging on the DDST Fine Motor scale in favor of Home Start children (Table IX-1).

Question 4

- Have Home Start outcomes kept pace with Head Start outcomes across most program goal areas, suggesting that the two programs are generally comparable in results?

Yes, in the areas of child school readiness, child medical care, mother/child relationship, mother as teacher, and home materials for the child. There was only one statistically significant difference in all of these areas favoring Head Start families over Home Start families after twelve months of enrollment (Tables IX-3 & IX-4). In that one area, Home Start mothers scored significantly worse than both control and Head Start mothers in the frequency with which they scolded their children in front of the tester (Table E-49); on the other scales in that area, however, Head Start and Home Start families were quite similar (Table IX-4). In the area of mother as teacher, Home Start mothers scored significantly higher than Head Start mothers on the H/S HES Mother Teaches Scale. In the other three areas families in the two programs appear to be about equally effective on them.

No, in the areas of child nutrition and use of day care services and medicaid. After both seven and twelve months the Head Start children scored significantly higher than Home Start children in Nutrition Total Scores and in several of the individual food group subscales (Interim Report V, Table VI-3; Table IX-3). Head Start mothers both times indicated that they used day care services more extensively than Home Start mothers, and it can be assumed that most Head Start mothers were referring to Head Start itself as the day care service used. Although there was a relatively large difference in the proportion of Home Start families using medicaid compared to Head Start families after seven months (Interim Report V, Table VI-4), the difference did not reach statistical significance until after twelve months (Table IX-4). It is not clear from available data why so many more Head Start families are using medicaid (28% in Head Start to 11% in Home Start), but the information reported in Part A of this volume suggests that part of the difference may be due to the evaluation methods used--for example in one site mothers referred to "health cards" rather than "medicaid" when asked about services, which would lead to some underreporting among Home Start mothers.

Probably not, in the areas of child social-emotional development and child physical development. In both of these areas Head Start families had significantly higher scores than Home Start families after twelve months on at least one of the measures included (Tables IX-3 & IX-4); none of these differences were significant after seven months, so they suggest an emerging advantage for the Head Start program. In child social-emotional development, testers viewed the Head Start children as being significantly more task involved and significantly more sociable in the testing situation than Home Start children. Since Home Start children were rated higher than control children on these same scales the Head Start advantage looks especially favorable. In the physical-motor area, Head Start children scored significantly higher on the DDST Fine Motor scale, but on the other measures were the same.

X

DISCUSSION OF SUMMATIVE RESULTS

Nearly every program evaluation has a cheering section of program advocates urgently wishing to know if there are any significant differences in favor of the program. As soon as some are found, a second question arises, "What do these differences really mean?"

Chapter IX described the significant differences that emerged from the twelve-month posttest data; this chapter probes some aspects of their meaning. There is always more than one interpretation for evaluation findings since they have different meanings in different contexts, and since in any given context their interpretability depends heavily on the presence of additional information. Yet it seems helpful to explore some implications of the observed significant differences in terms of:

- inherent methodological limitations;
- the six summative projects;
- the ten non-summative projects; and
- other home-based projects.

Threading through each of these contexts are the traditional evaluation concerns of validity and generalizability of findings.

The first section in this chapter presents some caveats that stem directly from the methodology employed. The second discusses three aspects of the study that might be kept in mind as the findings are interpreted: the six sites are representative of all 16 Home Start programs, the six summative sites did not all have identical outcomes, and some outcomes may be longer-term than others.

Methodological Implications

The criteria used in Chapter IX for deciding whether or not Home Start and Head Start made any difference came from traditional evaluation methodology--a difference significant at the 5% level of probability was considered adequate evidence of program effectiveness. However, no relationships have yet been demonstrated between statistically significant differences on these measures and long range improvements in the lives of children and mothers.

Statistical significance can help to screen differences that definitely do not make any real difference from those that may make a difference, but ultimately the issue of practical significance versus statistical significance must be considered. For the purposes of the last chapter the two were treated as equivalent, but in reality this probably varies measure by measure in each goal area.

For example, the statistically significant difference on the Preschool Inventory between Home Start and control children reflects an absolute size of about three items on a 32 item test; for the citrus fruit nutrition difference, the statistical significance reflects about one-tenth of one serving. The Preschool Inventory difference may be meaningful in some long range sense, but the citrus fruit difference is not--the one-tenth serving is far short of the seven-tenths additional serving needed to reach the recommended daily intake of citrus fruits.

The nutrition measure is unique among measures included in the Home Start battery in having defined absolute levels of adequacy (which are themselves the subject of disagreement among nutrition experts, however). If absolute ideal standards could be defined for other measures, it is just as possible that the observed significant differences might be as deficient for them as current findings are for the nutrition ideal scores. This raises the problem that no matter how improbable it is that the observed difference is a chance event according to statistical decision rules, the difference just might not make a difference in reality.

One statistic in the Figures from Chapter IX helps to expand interpretation of significant differences somewhat, but not fully. This statistic is ω^2 (omega squared), which roughly corresponds to the percent of measurement variability that is accounted for by knowing, in this case, whether a child is in the Home Start or control group. If ω^2 was 1.00, or 100%, every child's score could be perfectly predicted simply by knowing which group he was in. Unfortunately, the magnitude of ω^2 never comes anywhere near 1.00 in the typical data from program evaluations. More common are the levels presented in Table IX-1, often hovering at about two or three percent--indicating that more than 97% of the total variation in test scores between children is due to unexplained factors.

Little can be done about the problem of interpretation until clear standards are defined for each measure within each goal area; but these standards cannot be defined until further research is conducted into relationships between the important characteristics of children's lives and the evaluation measures.

Another problem in the interpretation of findings in this evaluation results from the "indicator" characteristic of many of the measures. Because many areas of mother and child performance had to be measured in a very short period of time in each family's home, measures were often chosen that "indicated" the presence of more meaningful changes but did not measure them directly. For example, in child medical care the recency of a child's last doctor visit has no necessary relationship to the quality or appropriateness of the care he received. Yet "months since last doctor visit" is one of four similar indicator variables of child medical care in the Home Start evaluation. In most cases if a child has not been to the doctor recently it is possible to conclude that this medical care is less than adequate, so in an indirect way the recency indicator has validity. Yet, the assumptions on which each indicator is based must be kept in mind at all times when interpreting findings.

Another methodological problem is the typically large gap between the kind of information obtained from the outcome measures employed in an evaluation such as this and the needs of decisionmakers at various levels in OCD. Even after favorable significant differences have been found, and their meanings somewhat understood in a larger context, it is seldom obvious how the findings relate to practical decisions faced by OCD staff. This is a task that must be approached from both directions--evaluators must help decisionmakers learn what kinds of information can be obtained, and decisionmakers must help evaluators to learn what kinds of information would be useful for making different kinds of decisions. Lack of understanding by evaluators of information needs in OCD made many of the Home Start evaluation decisions particularly difficult--and, ultimately, less productive than they might have been for the costs involved. One fact came clear as the evaluation moved through several reporting cycles and a dialogue established with decisionmakers: much of the information needed for decisions is far simpler and easy to get than commonly thought by evaluators. Much essential information simply involves counts of people, time, and dollars--much less complex than the behavioral measures which consume most of evaluators' attention. Although both kinds of information are essential, it has become clear that a different balance is needed for program evaluation contexts.

Three Comments on Findings for the Six Summative Sites

Generalizability to Non-Summative Sites

The six summative projects were not selected randomly from the 16 total sites, and even if they had been, six projects are not enought to permit conclusive scientific generalizability of findings to the remaining ten. To learn more about the degree of generalization possible, several comparisons between the six and ten projects were presented in the *Program Analysis* volume of *Interim Report V*. In general they revealed that the six sites are quite typical of the remaining sites, suggesting that outcomes reported in the *Summative Results* volumes are probably reasonable estimates of the outcomes for the non-summative sites as well.

Projects had different outcomes. Families from all six summative projects were pooled for the summative analyses, in order to arrive at conclusions about the National Program; some incidental analyses that were performed, however, suggested that outcomes were different for each project. Thus the outcome results presented in Chapter IX represent average results that may not be true for any of the six individual projects--the most successful projects will be underestimated by the average results and the least successful will be overestimated.

This has two implications. First, families currently in Home Start are experiencing different programs. On one hand this can be viewed as desirable, since ideally each family would experience a program uniquely tailored to its individual needs; on the other hand, to the extent that some variations seem inferior to others in terms of family outcomes this represents a program problem that should be confronted. Second, it would be extremely helpful to identify the characteristics of some projects that make them more effective than others. If the reasons for differential project effectiveness could be identified it would be easier to provide focused technical support to help the less effective projects.

Six projects are too few to identify characteristics of successful programs using statistical methods, but if additional project-by-project outcome analyses were performed it might be possible to arrive at a few exploratory conclusions that can be used to guide interviews with local project staff in probing for more complete answers.

Outcomes may be long-term. The current summative analyses use twelve-month data, and outcomes after, say, twenty-four months cannot be estimated from them; yet one of the strongest potential characteristics of home-based programs is the pivotal role they might play in shaping home conditions so effects last long after the family leaves the program. Two models supporting prolonged effects seem reasonable, both of which depend on long-term mother change resulting from her involvement in the program. In one model, the mother may be seen as becoming more aware of the developmental stages her child progresses through; then because of her increased awareness she can act toward the child in ways supporting growth at each developmental stage. In other words, in this model mothers gain an awareness and appreciation of "developmental stages" in general, without regard to a particular age level. Thus as her child enters public school she can alter her behavior to provide the needed support for a new stage of child growth. To a large extent all mothers follow this model in the natural course of events.

In the second model, mothers learn a reportory of appropriately supportive behaviors for children in the three to five age range. These skills would be learned by watching the home visitor and practicing them with her own child. Because her supportive behaviors are age-specific she would probably not be better than non-Home Start mothers at providing support when her child entered older stages, but she would be better for each younger sibling entering the three to five age range.

These two models have clear evaluation implications: in the first, one would expect to find program effects lasting for a long time in each child--several years perhaps; in the second, one would expect to find each three-to-five-year-old sibling from a family at a relative advantage with respect to his peers, but differences might fade soon after entry into public school without continued age-specific program support. Since the prolonged home-support idea is such an enticing aspect of home-based programs, and largely missing from center-based programs, the long-term possible program effects should be investigated thoroughly.

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NATIONAL HOME START EVALUATION

Interim Report VI:

Part C: Cost-Effectiveness Results

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XI

INTRODUCTION TO COST-EFFECTIVENESS RESULTS

Sections A and B of this volume have described the Home Start program as it operated over a twelve-month period at six out of sixteen local sites. The people involved in the program, the cost of the program, the home visit process and the outcomes produced by the program have been described in detail. The chapters in this third section of the report draw on information presented in earlier sections of this report and in the "Cost-Effectiveness Analysis" volume of the National Home Start Evaluation Study: Interim Report V to evaluate -- so far as the data will allow -- the cost-effectiveness analysis of that part of the Home Start program represented by the six summative local projects.

Chapter XII attempts to organize the policy and the administrative decisions which have shaped the Home Start program into a framework within which the cost and effect implications of those decisions can be analyzed. Policy and administrative issues which have the most important implications for the cost of the Home Start program are identified; a reasonable set of alternative decisions which could be made on each issue are enumerated; and the impact of each of the alternatives on the cost of the program are identified. By also evaluating the impact of alternative decisions on the effect of Home Start on focal families, chapter XII strives to determine -- so far as available data will allow -- the relative cost-effectiveness of the various policy and administrative alternatives. While the chapter is designed primarily as a record of the cost-effect implications of decisions which have shaped the existing Home Start program, most of the issues upon which the chapter focuses are those which are likely to be relevant to persons who will set up and administer modified versions of Home Start in the future.

Chapter XIII (last in this section) addresses the overall cost-effectiveness of Home Start as a program designed to foster the development of the focal families with which it works. The approach that is adopted is to compare the kinds (and quantities) of benefits which have been produced by Home Start projects with the kinds (and quantities) of benefits which could be produced by a similar type of program, Head Start, for equivalent levels of federal expenditure. This approach requires an accurate assessment of the relative costs of the two programs per family served so that an estimate can be made of how many families and/or children can be served by the two programs for the same level of expenditure. The final step in the analysis is a determination of the relative benefits produced by the two programs per family or per child. The reader is assigned the ultimate responsibility for deciding whether the cost and/or benefit superiority of Home Start relative to Head Start warrants a continued investment of resources in the home-based early childhood education program that Home Start represents.

XII

POLICY RELEVANT COST-EFFECT RELATIONSHIPS

Beginning with the design of the program and continuing through the start-up and operation of local projects, the characteristics of the Home Start program have been influenced by numerous policy and administrative decisions. During the design of the program, guidelines were drawn up which defined the objectives of the program, the type of service delivery mechanism to be used and the eligibility requirements for families to be served. Patterns for the staffing of local projects were planned, and target sites for funding of local projects were identified. During the implementation and operation of the program, the number, type and credentials of project staff were determined, and modified service-delivery patterns were evolved. By determining the characteristics of the Home Start program, many of the policy and administrative decisions which were made had important effects on the cost of the program (both total cost and cost per family served) and on the benefits of the program to focal families.

This chapter attempts to organize the policy and administrative decisions which have shaped the Home Start program into a framework within which the cost-effect implications of those decisions can be analyzed. The three-year National Home Start Demonstration Project is nearly completed (it will end in June 1975). Home-based early childhood education programs will continue to exist in the future -- but generally as auxiliaries to center-based Head Start projects. While this chapter is designed primarily as a record of the cost-effect implications of policy and administrative decisions which have determined the characteristics of the existing Home Start program, the issues upon which the chapter focuses are those which are likely to be of concern to persons who will set up and administer modified versions of Home Start in the future.

The chapter is divided into two sections. In the first section the policy and administrative issues which are the important determinants of the cost of the program are identified, and the cost implications of alternate decisions on each issue are described. The objective of the second section is to evaluate -- so far as available data will allow -- the cost-effectiveness of alternate decisions.

Characteristics of the Program Which Are Major Determinants of Cost

There are five general characteristics of Home Start projects which are subject to policy and administrative control and which have important cost implications. Each of these characteristics has been determined by decisions made at the national, regional and/or local level on several specific questions. A list of the general characteristics and the specific questions relevant to each are listed below.

1. Duration and Intensity of Service Delivery
   a. For how many months is a focal family encouraged to remain in the program?
   b. How frequently are home visits made to the average family?
   c. How long does the average home visit last?
   d. How much time is spent with focal families outside the context of the formal home visit (parent meetings, field trips, etc.)?
   e. What portion of the workweek of direct-service staff will be used for staff meetings, in-service training and other non-direct-service activities?
2. Credentials Sought in Hiring Home Visitors
   a. How much formal general education is sought in potential home visitor employees?
   b. How much job-specific formal education is sought?
   c. How much job-related previous experience is sought?
3. Number and Type of Support Staff
   a. What is the ratio of administrative to direct-service staff?
   b. What types of staff specialists and paid consultants are employed?
4. Supplementary Goods and Services Provided
   a. Are project funds to be used to provide medical services to focal families?
   b. Are project funds to be used to purchase food, clothing and housing for families who cannot obtain adequate quantities of each from their own income or from other public and private programs?

c. Are project funds to be used to pay family transportation to parent meetings, to offices of doctors, dentists, family counselors, welfare and housing agencies, etc., or to center-based and field-trip activities for children?

5. Target Sites for Funding of Local Projects

   a. Are target sites to be chosen in only rural areas, or in urban areas or both?

   b. How many families will a project be expected to serve and from how wide a geographical area?

   c. Will "matching fund" contributions be required from community sources? How large will the matching requirement be, and which kinds of community contributions can be used to satisfy the requirement?

Of all the policy and administrative decisions which have influenced the existing Home Start program, those which have had the largest impact on the cost of the program per family served have been the decisions which relate to the duration and intensity of the service provided to focal families. Decisions relating to the families' length of stay in the program, the frequency and length of the home visit and the non-direct-service functions of home visitors are the primary determinants of the amount of labor input allocated to each family. In Home Start, as in most social service programs, labor costs comprise 75% or more of the total cost of the program.

Length of Stay in Program: Home Start families can be encouraged to stay in the program for one year or for two years. Programs can maintain full operations for twelve months or shut down partially or completely during the summer. All of these decisions influence the effective length of treatment the average Home Start family receives. They also have a critical impact on the cost of Home Start per family served. Cost estimates based on the analysis of model Home Start budget described in the "Cost-Effectiveness Analysis" volume of National Home Start Evaluation: Interim Report V, are presented in Figure XII-1 below. To serve 1184 families (current average quarterly enrollment in the sixteen existing Home Start projects) for twelve months with the current caseloads for home visitors (10 families per home visitor) and the current average number of families per project, federal expenditures per family would be approximately $1460, and total federal expenditures would be $1.725 million. Total and per-family expenditures would be twice as high for a 24-month program. The cost savings which would result from changing from a twelve-month to an eight-month program are difficult to estimate because of the likelihood that not all program costs could be eliminated during summer months, but the maximum cost reductions which could be achieved would be a savings of 33% of the budget of a full-year program. The magnitude of the cost implications of decisions affecting the average family's length of stay in the program dictate that a very careful appraisal be made of the kinds and the magnitude of benefits to focal families which result from longer duration programs.

FIGURE XII-1

COST IMPLICATIONS OF VARIATIONS IN DURATION AND INTENSITY OF SERVICE DELIVERY

Cost Per Family Served

(Number of Families Served Per Million Dollars of OCD Funds)

# of Months Families Remain in Program	Ratio of Families Served to Home Visitors		
	8:1	10:1	12:1
24	3240 (309)	2914 (343)	2696 (371)
12	1620 (617)	1457 (686)	1348 (742)
8	1080 (926)	971 (1030)	899 (1112)

The estimates presented are based on calculations used to construct model budgets which were reported in the "Cost-Effectiveness Analysis" volume of National Home Start Evaluation: Interim Report V.

Assumptions and Methodology:

(1) Unit cost for a project serving families for one year with a family/visitor ratio of 10:1 is average OCD expenditures per family served as reported in Interim Report V for 80-family projects in "typical urban" and "typical rural" areas.

(2) To estimate the effect of changing family/visitor ratios to 8:1 or 12:1, it was assumed that only home visitor salaries and fringe benefits would change -- by the change in the number of home visitors required to serve 80 families at $6527 per home visitor (average of the rural and urban salaries recommended for home visitors in Interim Report V).

(3) To estimate the effect of reducing the number of months families are served from 12 to 8, 12-month figures were multiplied by two-thirds (assumes projects close down completely and have no continuing costs during summer months). Twenty-four-month figures are calculated as twice twelve-month figures.

Length and Frequency of Home Visits: Decisions relating to the length and frequency of home visits are the primary determinants of the caseload handled by the average home visitor. Figure XII-2 provides a breakdown of how the typical home visitor currently allocates her time. The current allocation of home visitor's time requires a caseload of ten families per home visit.

FIGURE XII-2

CURRENT ALLOCATION OF HOME VISITOR'S TIME

Category	Percent of Workweek	Minutes per Family
Home Visits	41	98
Family Support[1]	25	60
Travel	7	17
Training	18	43
Other (non-direct-service)	9	22

Were a decision made to change the frequency of home visits, the length of the home visit or the average contact time between home visitor and family outside of the formal home visit, home visitor caseloads would have to change. Were decisions made which reduced caseloads from 10:1 to 8:1, cost per family would rise by approximately 11% (see Figure XII-1 above for details); decisions which increased caseloads from 10:1 to 12:1 would reduce cost per family by approximately 7%. The cost changes which would result from changes in the length and frequency of home visits are not as large as those which would result from variations in the average family's length of stay in the program, but the issue of length and frequency of visits should not be ignored. If home visitors with caseloads of twelve families are no less effective in promoting the development of families than home visitors with caseloads of eight families, the Home Start program could serve between 62 and 186 additional families (8-month and 24-month programs, respectively) with no loss in effectiveness for each million dollars in federal spending.

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[1] Includes time spent with families outside home (field trips and referrals as well as time spent planning activities for home visits.)

Non-Direct-Service Functions of Home Visitors: Home Visitors currently spend about 5-1/2 days per month on staff meetings, training sessions and other non-direct-service activities. Were this time to be reduced to one day per month, home visitor caseloads could be increased from 10:1 to 13:1 with no reduction in average contact time with families. Such a change would permit Home Start to serve over 300 more families for the current level of federal spending -- a 26% increase in the number of families served. The time home visitors spend on non-direct-service activities should be evaluated to determine whether it increases the effectiveness of home visitors enough to warrant so substantial a curtailment in the number of families served.

Credentials Sought in Hiring Home Visitors: There are no current program-wide guidelines specifying specific educational credentials and job-experience which should be required in hiring home visitors. As a result, home visitors have a wide range of educational backgrounds[1] and a wide range of previous job experience. Were program-wide guidelines imposed which encouraged project administrators to pay wage premiums if necessary, to attract home visitors with college degrees and/or substantial job-related previous work experience, salary scales for home visitors would rise. It is difficult to estimate the increased expenditures which would result from the imposition of such guidelines, for the relationship between salaries and employees' credentials is subject to wide variation. A rough estimate of the increased cost of Home Start per family might be constructed as follows. Home visitors are currently paid 68% of the average budget of a low-income family of four in the communities in which the home visitors work (see "Cost-Effectiveness Analysis" volume of Interim Report V). An actively pursued policy of recruiting home visitors with college degrees and job-related work experience might raise salaries scales to 100% of the average budget of low income families. If so, federal expenditures would rise by $200-300 per year per family served (15-20%) -- depending on the established caseload of families per home visitor. These figures are based on an increase in the average salary of home visitors of $2785 per year (from the present level of $5918 to $8703).[2]

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[1] Of current home visitors, 14% do not have a high school diploma, while 11% are college graduates. The average years of school completed is in excess of twelve. See pages 19-20 of "Program Analysis" of National Home Start Evaluation: Interim Report V.

[2] The magnitude of this increase probably overstates the size of the premium which would have to be paid for college degrees or for substantial previous experience. Since $8700 seems like a reasonable starting salary to pay experienced, well educated teachers, the fact that current pay scales have to be increased by nearly $2800 to reach that level supports the hypothesis that existing pay scales are too low.

Number and Type of Support Staff: Approximately 40% of current federal expenditures on Home Start is allocated to pay the salaries of administrative staff, specialists and consultants. Every local project employs at least one full-time administrator and one secretary/bookkeeper, but many projects employ one or two additional administrators and several staff specialists. In North Carolina, Ohio and Tennessee, for example, the ratio of administrative staff to home visitor staff (measured in terms of dollars spent on each) is three to four times higher than in Kansas and Texas (TMC). Similar variations occur across local projects in the ratio of staff specialists (nurse, nutritionist, educational coordinator, etc.) and paid consultants to home visitors. There is clearly no program-wide policy on the number and type of support staff local projects should employ.

The cost implications of policy and administrative decisions on support staff depend on the number and type to be employed. It seems reasonable that a minimum support staff should consist of one administrator and one secretary/bookkeeper. The model budgets presented in Interim Report V provide a rough estimate of the cost increases which result from expansion of support staff beyond this minimum level. The model budgets were based on the assumption that the typical support staff would include paid consultant ($5000-$5500 per year), a coordinator/supervisor and a nurse/nutritionist. Were these additional persons not included in the budget, federal expenditures would decline by $328 per family per year (20-24% reduction in unit cost, depending on the caseload ratio). For these additional support staff to be warranted, their presence must increase the benefits provided to current focal families by enough to justify a 20-24% curtailment in the number of families the project serves.

Supplementary Goods and Services Provided: The Home Start program currently spends a relatively small portion of its total budget on supplementary goods and services -- medical and dental care, food, clothing, housing or transportation for focal families. If all expenditures on paid consultants and a part of travel costs are counted as providing supplementary services, each family receives perhaps $100 per year of such services out of federal funds.[1] There is no equivalent in Home Start of the U.S. Department of Agriculture's program to provide free meals to Head Start children ($125 per Head Start child in the five Head Start sites for which data are available). The cost of providing more supplementary goods and services than Home Start currently provides cannot be calculated without knowledge of what additions would be made, but the elimination of all that currently is provided would reduce federal expenditures by 6-7%.

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[1] Substantial additional supplementary services are provided to families but are obtained as contributions from community sources.

Location of Target Sites: Current Home Start projects are located in a wide range of geographical locations and in both rural and urban settings. Regional variations in the cost of labor, office space and materials make Home Start projects more expensive in some locations than in others. The differential in prices between urban and rural areas, for example, is large enough that projects located in rural areas cost roughly 15% less per family per year than projects located in urban areas (based on the differential in the cost of living index between the "average" rural and urban areas in the U.S.). Variations in population density (affecting transportation costs and potential project enrollment) and in the availability of community services (affecting the need to spend federal funds to obtain medical and dental care) affect cost per family across local projects.

While factors such as local resource prices, population density and availability of community resources are not subject to direct administrative control, some indirect control is possible. A policy decision could be made, for example, to locate projects in low cost-of-living, high density areas where community resources are available and accessible and where the number of families eligible for participation in Home Start is high. Such a decision would maximize the number of families served for a given level of federal spending. There is an obvious question, however, whether such a decision would be consistent with the national responsibilities of federal agencies.

Minimum Enrollment Per Project: The analysis on cost-effectiveness in *Interim Report V* indicated that cost per family declines as the number of families served by the project rises. This occurs because certain Home Start costs (e.g., salary of secretary/bookkeeper) are largely independent of the number of families served; increased enrollment reduces unit cost by spreading these fixed costs over more focal families. Data for the past year indicate that average enrollment across existing projects ranged from 51 to 139 families. The analysis reported in *Interim Report V* indicated that unit costs decline by 10% as enrollment increases from 50 to 80 families and by 33% if enrollment rises from 50 to 110. Unless it can be established that larger projects are less effective, there is a strong justification for maintaining enrollment at high levels.

Matching-Contributions from Community: Existing Home Start projects have generally been required to match 10% of the funds provided by the Office of Child Development with contributions from the local community. All projects have met or exceeded that requirement, and resources obtained from non-OCD sources, in fact, comprise 22% of the average project's total resource budget. The goods and services obtained from community sources were analyzed in *Interim Report V*, and at least 90% were clearly essential to the operation of the local projects (donated office space, professional time, office equipment, etc.).

If local projects had not obtained these contributions from local communities, either OCD expenditures would have had to be increased by more than 25% or project operations would have been substantially curtailed.

Cost-Effect Implications of Alternate Policy Decisions

The objective of this section is to evaluate -- so far as available data will allow -- alternate decisions on the policy questions raised above. In some instances not enough data has yet been collected by the National Home Start Evaluation Study to make an evaluation possible, but such data will be available for the next report. In other instances, an evaluation is simply beyond the scope of the study. Such instances are pointed out below.

Length of Stay in Program: One of the important advantages of the Home Start Evaluation Study from a researcher's point of view is that families were assigned to treatment and control groups on a random basis in order to maximize the ability of the study to isolate the effects of treatment versus non-treatment. The study was not designed to compare the effects of eight-month, twelve-month and twenty-four-month programs; no random assignment of families was made to groups receiving different kinds of treatment. As a result, any research findings on the relative effects of different lengths of treatment must be interpreted with care.

Data are available on the test gains recorded over a twelve-month period by two groups of Home Start (treatment) families; one group which reported they received no home visits during June, July and August of 1974 and another group which reported they did receive some home visits during that period. The number of visits received during the summer months by families in the second group is not known, and the two groups tend to be distributed unevenly across the six summative projects. Both of these facts make the differences in the test performance of the two groups a somewhat questionable measure of the relative effects of treatment versus no treatment during the three-month summer period.

Covariance analysis was used to measure differences in the post-test (Fall 1974) performance between the two groups of families when pretest scores (Fall 1973) are held constant. Statistically significant differences were recorded on only two test measures, and these are likely to be statistical artifacts since differences on so many other test instruments were non-significant.[1] The findings reported in Chapter IV above on program activities during summer months indicate that home visits occur so infrequently during that period that tests of differences in test scores of families who receive no summer visits and families who receive some summer visits is not a reliable test of the relative effects of eight-month and full twelve-month programs. Whether Home Start should be an eight or twelve month program seems to be a moot question. A more relevant and important question would seem to be whether Home Start can be a twelve-month program -- given the frequent interruptions which are likely to continue to occur during the mid-May to mid-September period.

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[1] If no real relationship exists between two variables, repeated tests for the presence of such a relationship will reject the null hypothesis only 95% of the time for a 95% confidence level.

Length and Frequency of Home Visits: Results reported in Interim Report V indicated that those home visitors who maintained less than 90-120 minutes of total contact time per focal family per week tended to have significantly less effect on the test performance of their focal families than home visitors who maintained contact time in the 90-120 minute range or above. Increases in contact time beyond the 90-120 minute range were not associated with further increases in test performance. The differences in test performance between the two groups of families were roughly equivalent to the differences in test performance between Home Start and control families.[1] If no changes are made in the allocation of home visitors' time to non-direct-service functions, 90-120 minutes of contact time per family per week translates into a caseload of between 9 and 13 families per home visitor. Although the analysis used to support a judgment needs to be repeated when additional data become available, on the basis of existing evidence it does not seem a wise policy to reduce caseloads below 9:1 nor to increase them above 13:1. Reductions below 9:1 increase program costs without improving outcomes, and increases above 13:1 endanger the effectiveness of the program.

Non-Direct-Service Functions of Home Visitors: Since the allocation of home visitors' time tends to be quite similar within site and quite different across sites and since test data are available for only six sites, insufficient degrees of freedom are available with which to test hypotheses about the increases in effectiveness of home visitors which result from time spent in staff meetings and training sessions. A determination of the cost-effectiveness of time spent by home visitors on these activities is beyond the scope of this study. Because the use of home visitors' time in these activities reduces the number of families the program can serve by as much as 25%, consideration should be given to addressing this issue in future research efforts.

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[1] These analyses were not repeated for this report but will be repeated again in the spring.

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Credentials Sought in Hiring Home Visitors: Tests of the relationship between family test performance and the educational attainment or previous experience of home visitors have indicated that no significant relationship exists. There is no available evidence which would warrant a policy of paying premium wages to home visitors with college degrees or several years of job-related work experience. The evidence does not indicate that such persons should be excluded from consideration as home visitors.

Number and Type of Support Staff: Statistical techniques cannot be used directly to determine the effects on program effectiveness of the presence or absence of particular types of support staff. Only indirect and judgmental evidence is available. The recommendation made in Interim Report V that local projects give priority to hiring a field supervisor of home visitors was based on two pieces of indirect evidence. The judgment of research staff who had visited local projects that more supervision might be helpful and statistical analysis that failed to find any association between the activities emphasized in home visits and the test performances of focal families. Similar statistical tests were conducted on the most recent data available; the results confirmed the earlier findings, that no significant relationships exist. The recommendation in Interim Report V that a nurse/nutritionist be hired at each local project was based on the observation that Home Start families performed no better than control-group families on measures of the nutritional intake of children. Home Start families continue to perform no better than control families on nutritional intake, but results reported in chapter IV above indicate that the Home Start program is making a more substantial effort to improve nutritional intake than was previously recognized. The need for a nurse/nutritionist is less clearcut than it appeared when the previous report was written. Further judgments on how many and what types of support staff are appropriate for local projects cannot be made on the basis of available evidence.

Provision of Supplementary Goods and Services: A determination of what types and quantities of supplementary goods and services should be provided by Home Start is also outside the scope of the Home Start Evaluation Study. The $100 worth of such goods and services currently being provided per family seem by their very nature (medical and dental care primarily) to be cost-effective. No data are available with which to measure their impact on Home Start families.

Location of Target Sites: The relationships between program effectiveness and decisions relating to the rural/urban location of target sites, the minimum enrollment levels at local projects and imposition of matching-fund requirements all appear to be tautological. These decisions all affect the cost of the program and, thereby, the number of families who can participate in the program for a given level of federal spending. The binds and the magnitude of the benefits of Home Start to individual families are not affected by these decisions.

Summary

Numerous policy and administrative decisions have been made during the design, implementation and operation of the Home Start program which have had important effects on the cost of the program and on the benefits received by focal families. The principle findings on the cost-effect implications of these decisions are the following:

- A policy of encouraging families to remain in the program for twenty-four months would, if successful, make the program twice as expensive as a program of one-year duration. No research evidence is available on the additional benefits accruing to families during their second year in the program.
- A policy of closing down projects during a four-month period over the summer would reduce the cost of the program by as much as 30%. The evidence that is available with which to measure the additional benefits from operations during summer months is too ambiguous to serve as a guide to policy. Perhaps the most important question is not whether families benefit from a summer program but whether summer operations are inevitably curtailed too much by circumstance (vacations, presence of school-age siblings in the home, etc.) to be potentially cost-effective.
- Increases in the frequency and/or length of home visits would require a reduction in the caseloads of home visitors; reduction in frequency and/or length of visit would permit an increase in caseloads. A reduction in caseloads from the current level of 10:1 to 8:1 would increase costs by 11%; an increase in caseloads to 12:1 would reduce costs by 7%. The available evidence indicates that caseloads of less than 9 families and more than 13 families per home visitor would not be cost effective. Further analysis for the next report may be able to narrow this range of uncertainty.
- By reducing the time home visitors spend on staff meetings, training sessions and other non-direct-service activities from the current level of 5-1/2 days per month to one day per month would permit an increase in caseloads from 10 families to 13 without

reducing contact time with families. Costs would decline by 26%. No data is available to determine how time spent on non-direct-service activities affects the effectiveness of home visitors.

- A policy of paying wage premiums to recruit home visitors with college degrees and/or substantial previous job-related experience could increase the cost of Home Start by 15-20%. There is no evidence that effectiveness is related to educational attainment or previous work experience, so there appears to be no justification for paying wage premiums for more "professional" credentials.

- Hiring a coordinator/supervisor and a nurse/nutritionist and paying $5000 per year for consultants at a local project in an average cost-of-living area could increase project costs by 25-32%. There is only indirect and fragmentary evidence available to evaluate the impact of support staff on the effectiveness of the program.

- Costs could be reduced by 6-7% by eliminating the current expenditure of $100 per family on supplementary goods and services (largely medical and dental care). These expenditures have face validity, but no data are available to measure their impact on Home Start families.

- Regional variations in the cost of labor, space and materials can have a substantial effect on the cost of operating Home Start projects in different locations. A policy of locating projects in low cost-of-living areas to save money is probably inconsistent with the national responsibilities of federal agencies.

- Active encouragement to local project administrators to maintain enrollment at maximum levels could substantially reduce the cost of the program. Projects could reduce cost per family served by 10% by increasing enrollment from 50 to 80 families and reduce cost by 33% by increasing enrollment from 50 to 110.

- The policy of requiring matching-fund contributions from local communities has increased essential resources available for the operation of local projects. Had projects not obtained such contributions, OCD expenditures would have had to increase by 25% or project operations would have had to be substantially curtailed.

XIII

COST/EFFECTIVENESS OF THE HOME START PROGRAM

Several techniques have been used to evaluate the relative merits of alternative uses of scarce resources. The most widely used technique is cost/benefit analysis. Its application requires accurate measures of the monetary value of both the costs and benefits of particular programs. Those programs are undertaken for which the value of benefits exceeds the value of costs. A second analytical technique is least-cost analysis. Its application requires a well defined set of absolute objectives and accurate estimates of the costs associated with alternative programs for achieving those objects. The least-cost program is chosen. A third technique is constant-cost analysis. It consists of a listing of the benefits (often in qualitative terms) that would results were a given set of resources invested in alternative programs. The program which seems to have the best list of benefits is implemented first.

Cost/benefit analysis and least-cost analysis are not useful techniques for evaluating the cost/effectiveness of the Home Start program. Cost/benefit analysis is not useful because no measures are available of the monetary value of many of the benefits provided by Home Start. Least-cost analysis is not useful because at least some of the objectives of the program are not absolute. School-readiness, for example, is not a categorical (achieved/non-achieved) objective.

The technique which remains, constant-cost analysis, has an important disadvantage relative to the other two techniques. Its output is not a decision (buy/don't buy) but a set of facts which policy-makers can use to reach a wise decision. This third technique is used below to evaluate the cost/effectiveness of the Home Start program--by comparing the benefits the program produces for a given level of federal spending to the benefits provided by a similar program, Head Start, for the same level of federal spending.

The chapter is divided into two sections. In the first section comparisons are made of the cost of Home Start per family served and the cost of Head Start per child enrolled. Estimates of the relative cost of the two programs are subject to uncertainties, and the sources of these uncertainties are enumerated. The second compares the benefits of the two programs. Together the two sections frame the question that policy-makers must resolve: When Home Start is compared to another, longer established early childhood education program, do the benefits provided by the program warrant the resource investment the program requires?

Unit Costs: Head Start and Home Start

Figure XIII-1 presents measures of federal expenditures per family enrolled in the Home Start program and per child enrolled in the Head Start program. Unit costs in Home Start range from $1114 in Kansas to $1553 in Ohio. Variations in unit costs for Head Start are larger, from a low of $1167 in Arkansas to a high of $2328 in Houston, Texas.[1] The Head Start project in Cleveland, Ohio did not provide financial data in time for inclusion in this report.

Measures of the relative cost of the two programs are subject to numerous uncertainties. First, the focus of the Head Start program is primarily on the children enrolled in the Head Start centers, while the focus of Home Start encompasses entire families--parents as well as children. Consequently, the most relevant measures of units costs are different for the two programs--cost per child for Head Start and cost per family for Home Start. The second problem with measures of relative costs is that unit costs for the two programs fluctuate substantially from one site to another. The ratios of unit costs for Head Start to unit costs for Home Start for the five sites for which common data is available indicate that Head Start is 75% more costly than Home Start in West Virginia but 7% cheaper in Arkansas. A third difficulty is introduced by regional variation in the cost of labor, space and materials. Educational programs are more expensive in high cost-of-living areas than in low cost-of-living areas. Averages of unit costs calculated from data for only five sites (all areas where costs are below national averages) will not necessarily reflect unit costs at the national level. A fourth problem is that the figures reported in Figure XIII-1 take account of only federal expenditures. Since data on contributions of goods and services from local communities is not available for Head Start projects,[2] no comparison is possible of the total resource cost of the two programs per family or child served. Failure to take community contributions into account may systematically bias unit cost comparisons in favor of one program or the other.

Given all of the uncertainties involved, the reader must be very cautious in interpreting and applying the estimates of average unit costs which are presented in Figure XIII-1. These two averages, $1732 for Head Start and $1318 for Home Start, suggest that Head Start is 31% more costly per child enrolled

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[1] The figure for the Houston Head Start project is, unlike the other figures, based on capacity enrollment. Expenditures per child actually enrolled in the Houston Head Start project was $3767.

[2] An attempt was made to collect data, but records of contributions to Head Start were so numerous that the cost of compiling such data was prohibitive. Community contributions account for roughly 20% of the resources available to Home Start.

FIGURE XIII-1

COMPARISON OF UNIT COSTS FOR
THE HOME START AND HEAD START PROGRAMS

(10/1/73 - 9/30/74)

	Home Start		Head Start	
Site	# Families[1]	Federal Expenditures[2] Per Family	# Children[1]	Federal Expenditures[3] Per Child
Alabama	83	1141	223	1435
Arkansas	83	1251	533	1167
Kansas	76	1114	347	1432
Ohio	70	1553		n.a.
Texas (Houston)	64	1539	1641	2328[4]
West Virginia	139	1311	175	2296
Average[5]	86	1318	584	1732

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[1] Based on enrollment except the figure reported for the Houston Head Start project. The figure reported for Houston Head Start is reported capacity as of Fall 1974; actual enrollment in Fall 1974 was 1014. The capacity figure was used to avoid the distortion in estimates of expected future unit cost which would result from using the very low enrollment figure.

[2] Includes some funds from non-OCD sources and some contributions to Home Start from local Head Start projects--12% of total federal expenditures.

[3] Includes funds from the U.S. Department of Agriculture for reimbursement of certain food costs, some non-OCD funds and a small contribution to Head Start from a local Home Start project--in all, 5% of total federal expenditures.

[4] If calculated on the basis of enrollment of 1014, federal expenditures per child would be $3767.

[5] Averages are the sum of the entries in each column divided by the number of entries. This method of calculation weights unit costs in large and small projects equally.

than Home Start is per family enrolled. Given the range of the ratio of unit costs for the two programs, a wiser, more conservative interpretation of the data would be the following:

- Depending on the type of staff employed, the type of service provided and the duration of tenure in the programs, unit costs for Head Start will range from "nearly twice as high as" to "about equal to" unit cost for Home Start.
- Based on a relatively small sample of data, a full year of the type of service provided by Head Start per child will cost the federal government 25-35% more than a full year of the type of service provided by Home Start per family.

The last statement is made with substantial trepidation, but it is the best estimate of the average relative costs of a 25-35% cost differential should be used by those who, having their own subjective judgements about the relative benefits provided by the two programs, wish to make their own cost/effectiveness evaluations.

The comparisons of Home Start and Head Start test results which are reported in section II of this volume are based on test scores recorded in four of the six sites referred to in Figure XIII-1. The four sites are Alabama, Arkansas, Texas and West Virginia. The Home Start and Head Start families who participated in the testing were divided fairly evenly over the four sites--roughly 25% of each group were located in each of the four sites. Because of this equal distribution of families, the test results weight the effectiveness of each program about the same across the four sites. To determine the relative resource costs invested in the two programs to achieve these test results, it seems appropriate to construct measures of average unit costs for the two programs which are based on unit costs in only the four sites involved in the comparison and which apply equal weights to unit costs in each of the four sites. So calculated, average federal expenditures per Home Start family were $1310 and average federal expenditures per Head Start child were $2166.[1] While these two figures are not intended as estimates of the relative costs of the two programs at the national level, they do accurately reflect the value of the resources (federally-paid-for only) which were invested to obtain the test performances which were recorded. If a well defined functional relationship exists between the resources invested and the benefits produced, for any given level of federal spending Home Start could replicate its recorded benefits for 65% more families than Head Start could replicate its recorded benefits for. If the reader believes that the unit cost estimate of $2166 for Head Start overstates the real cost of producing the benefits recorded by Head Start families due to inefficiencies in the four Head Start projects involved in the evaluation, then the 65% cost advantage attributed to Home Start is an overestimate.

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[1] This estimate makes use of unit cost for the Houston, Texas Head Start project calculated on the basis of actual enrollment rather than capacity ($3767 rather than $2328). The rationale for using the figure based on actual enrollment is that $3767 best represents the value of the resources which were actually invested in the development of the typical child enrolled in the Houston program.

Relative Program Effects: Head Start and Home Start

The relative test performances of Home Start and Head STart families are described in detail in section II of this report. The major points of comparison will be reviewed here only briefly. Program effects have been grouped into nine major categories:

- School-readiness: Differences in test scores between the two groups on measures of school-readiness are not statistically significant. Between Spring and Fall of 1974 Head Start children recorded larger gains in this area, however. The higher scores recorded by Home Start children on the Pre-School Inventory in May 1974 did not carry over to Fall 1974, for differences between the two group means are no longer statistically significant.

- Social-Emotional Development: Although no significant differences were recorded between the two groups on several measures of social emotional development, Head Start children now have significantly higher scores on measures of both test orientation and sociability.

- Physical Development: No differences occur on height, weight and gross motor skills, but Head Start children exhibit small but statistically significant higher fine motor skills.

- Nutrition: The superior performance of Head Start children is quite evident in this area. Their scores are higher on measures of intake of milk, A-vegetables, citrus fruits, other vegetables and total nutritional foods. Home Start children use more vitamins. No differences occur on intake of meat, eggs or bread and cereal. Nutritional intake for both groups is below accepted standards.

- Medical and Dental Care: No significant differences emerge in this area.

- Mother/Child Relationships: On only one measure out of four does a statistically significant difference emerge. Mothers of Home Start children exhibit more punitive behavior toward their children than mothers of Head Start children.

- Mother as Teacher: Home Start families score somewhat higher in this area. Home Start mothers spend more time serving as teachers to their children than Head Start mothers do.

- Home Materials for Child: No significant differences were recorded.

- Use of Community Resources: Head Start families have higher utilization rates for medicaid and day care but a lower utilization rate for planned parenthood. Utilization rates for other community resources were not statistically significant between the two groups.

When a Home Start/Head Start comparison was last made, in Interim Report V, the differences in the effects of the two programs on families they serve were more marginal than they now appear to be. Previously Head Start families performed better in the areas of health and nutrition, immunizations and utilization of day care. Home Start families performed better on school-readiness (results may have been due to the timing of tests), frequency of doctor visits and the mother's role as teacher to her children. The differential on school-readiness has now disappeared; Head Start's superiority on nutritional intake has increased; and Head Start children have begun to show some superiority in social-emotional development and in gross motor skills. In terms of program effects, the balance appears to have shifted in favor of the Head Start program. Further evidence will be available for the next report to determine whether the shift will continue and how large the differentials will become. A qualified judgement was offered in the last report that "the slightly better performance of the Head Start program in those areas in which the services of the two programs overlap is not great enough to establish beyond question that the services provided by Head Start..are of greater social value than the services Home Start could provide..." to a somewhat larger number of families for the same level of federal expenditure. While it does not seem appropriate to rescind that judgement based on current evidence, the degree of confidence with which the judgement is made is now somewhat less. The implications of the most recent data are more ambigious than the implications of the data upon which the last report was based.

TABLES[1]

Program Analysis Section

(Part A)

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[1] No tables for Chapters I and II

TABLE III-1

HOME START PROJECT ENROLLMENT
FOR THE PAST YEAR

16 Projects	Families		Focal Children		0-5 Children	
	Total Served	Average Quarterly Enrollment	Total Served	Average Quarterly Enrollment	Total Served	Average Quarterly Enrollment
Alabama	119	83	179	121	226	161
Arkansas	135	83	162	99	230	142
Kansas	123	76	185	112	246	152
Ohio	112	70	157	95	212	130
Tx-H	144	64	187	85	302	132
W. Va.	218	139	349	218	480	301
Total Summative Sites	851	86	1219	122	1696	170
Alaska	79	51	87	54	119	122
Arizona	91	63	109	76	180	117
California	121	65	157	83	242	127
Massachusetts	81	55	97	68	122	80
Nevada	136	69	150	77	272	135
New York	120	72	144	86	204	124
No. Carolina	91	58	91	58	146	95
Tennessee	123	76	135	86	209	131
Tx-TMC	N/A	86	N/A	75	N/A	161
Utah	201	73	221	80	442	157
Total Non-Summative Sites	1043	67	1191	74	1936	125
Total All Sites	1894	74	2410	92	3632	142

TABLE III-2

HOME VISITOR CASELOADS

Site	Caseload
Alabama	13
Arkansas	12
Kansas	11
Ohio	9
Texas-H	10
W. Virginia	13
Average for Summative projects	11
Alaska	12
Arizona	9
California	13
Massachusetts	7
Nevada	12
New York	8
N. Carolina	9
Tennessee	15
Texas-TMC	8
Utah	8
Average for Non-Summative projects	10
Average for All projects	10

TABLE III-3

PERCENT OF TIME SPENT IN CONTENT AREAS, INTERACTION PATTERNS AND ACTIVITY MODES DURING THE HOME VISIT

	ALABAMA	ARKANSAS	KANSAS	OHIO	TEXAS	WEST VIRGINIA	AVERAGE
TOTAL TIME (minutes)	57	74	61	55	70	113	72
Child Content	58%	51%	45%	73%	60%	70%	61%
School Readiness	31	17	11	25	32	24	23
Reading	1	4	4	1	3	4	3
Physical Development	19	18	22	35	20	36	26
Emotional Development	7	12	7	11	5	5	8
Child Other	0	0	1	1	0	1	1
Parent Content	43	47	57	27	40	31	40
Educating the Child	14	9	13	9	12	2	9
Family Health	7	7	12	3	3	5	6
Family Nutrition	4	7	7	1	0	3	4
Adult Education	2	0	2	1	0	0	1
Services	2	3	6	2	1	1	2
Parental Concerns	12	20	11	9	21	16	15
Parent Other	2	1	6	2	3	4	3
Home Visitor Initiates	90	79	95	79	72	78	82
HV to FP	26	27	37	15	23	14	23
HV to FC	41	40	24	56	26	48	40
HV to FP and FC	23	12	34	8	23	16	19
Focal Child Initiates	4	1	1	12	3	7	4
FC to HV	2	1	0	7	2	3	2
FC to FP	0	0	1	2	0	2	1
FC to HV and FP	2	0	0	3	1	2	1
Focal Parent Initiates	7	93	4	11	25	14	13
FP to HV	3	9	2	3	6	8	6
FP to FC	4	4	1	7	16	5	6
FP to HV and FC	0	0	1	1	3	1	1
HV-FP Interactions	29	35	38	18	28	22	28
HV-FC Interactions	42	41	24	63	27	51	42
FP-FC Interactions	4	4	3	8	16	6	7
Three-way Interactions	25	13	35	11	27	19	21
HV tells	70	82	83	57	42	58	64
HV asks	18	12	9	20	6	23	15
HV listens	12	6	8	23	42	14	17
HV ignores	0	0	1	0	7	5	3
HV not present	1	0	0	0	0	1	1
FC tells	51	38	40	71	49	61	52
FC asks	5	4	6	0	2	2	3
FC listens	24	30	32	18	22	18	23
FC ignores	14	21	16	5	18	15	16
FC not present	7	97	97	6	8	3	5
FP tells	23	40	32	25	31	33	31
FP asks	10	5	27	13	17	7	12
FP listens	53	52	36	46	43	46	46
FP ignores	7	1	3	5	6	9	6
FP not present	5	2	1	10	2	3	4

Some categories do not sum to 100% because of missing data and round-off error.

TABLE III-4

TYPE OF REFERRAL BY RECIPIENT FOR THE TYPICAL FAMILY

Subject Area/Recipient	Focal Child	Focal Parent	Other	Total
Health	3.3	0.4	0.2	3.9(57%)
Psych/Social Services	0.6	0.9	0.2	1.7(25%)
Nutrition	0.2	0.6	0.1	0.9(13%)
Education	0.1	0.3	-	0.4(6%)
Total (%)	4.2 (61%)	2.2 (32%)	0.5(7%	6.9 -

TABLE IV-1

REASONS WHY HOME VISITS ARE NOT MADE

	mid-year vacation days*	Thanks-giving	Christmas and New Year's	Easter	training/ visits to other projects	other	total # of weeks no home visits take place
Alabama	0	0	2 wks	1 wk	1 wk	0	4 wks
Arkansas	1.3 wks	1 wk	2 wks	0	0	0	4.3 wks
Kansas	1.2 wks	1 wk	1 wk	0.5 wk	0.8 wk	12 wks**	16.5 wks
Ohio	0	0.5 wk	2 wks	0	10 wks	0	12.5 wks
Texas-Houston	0	0.5 wk	2 wks	-	-	0.4 wk	2.9 wks
West Virginia	30 wks	0.5 wk	1 wk	1 wk	2 wks	-	7.5 wks
AVERAGE		0.9 wk	0.6 wk	1.7 wks	2.3 wks	2.1 wks	8.0 wks

* Included here are only vacation days which are taken while the program is fully operational. Vacation days taken at Christmas time or other holidays are not included in this column.

** During the summer of 1974, Wichita Home Start shifted program emphasis and is providing more group activities for program participants throughout the year, decreasing the number of home visits made. Included in the figure also are the number of weeks Home Visitors spent providing health care and screening for focal children during the initial phases of the program year.

TABLE IV-2

PROJECT PROFILE OF HOME VISIT FREQUENCY AND LENGTH DESIRED BY FAMILIES

	AKA,	ARK[2]	KANSAS	OHIO	TEX-H	W.VA.	TOTAL
% of families interviewed	51	42	38	37	33	33	234
Frequency of Home Visits							
Once a week	54%	50%	38%	35%	25%	44%	41%
Twice a week	29	40	39	60	39	25	39%
More than twice a week	12	5	23	2	36	23	17%
Don't know	--	2	--	3	--	8	3%
Length of Home Visits							
Less than 1 hr.	15%	4%	5%	8%	6%	0%	6%
From 1 to 2 hrs.	67	59	80	67	79	47	65%
From 2.1 to 3 hrs	14	15	5	15	6	31	15%
More than 3 hrs.	4	14	8	2	3	15	8%
Don't know	--	8	2	8	6	7	6%

[1] Percentage for families wishing a change and those not wishing a change were combined to show an overall profile.

[2] In Arkansas 3% of the families interviewed indicated they'd like the Home Visitor to come less than once a week.

TABLE V-1

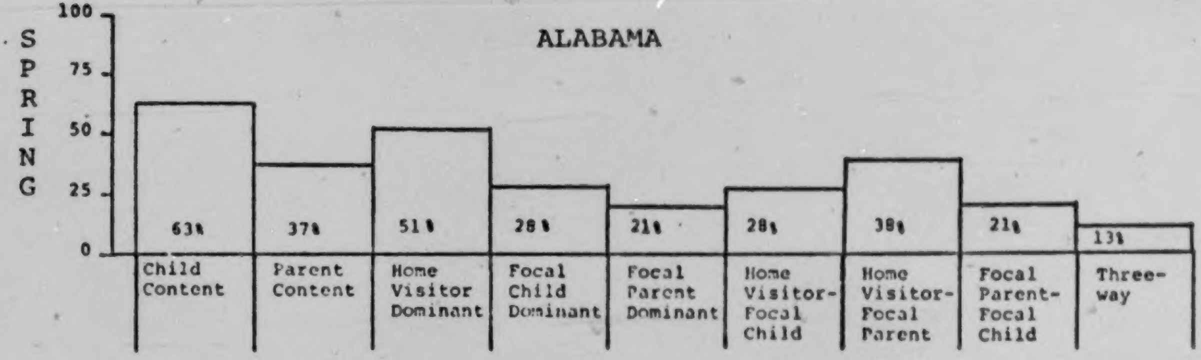
COMPARATIVE DATA ON HOME VISIT OBSERVATIONS
SPRING 1974 AND FALL 1974

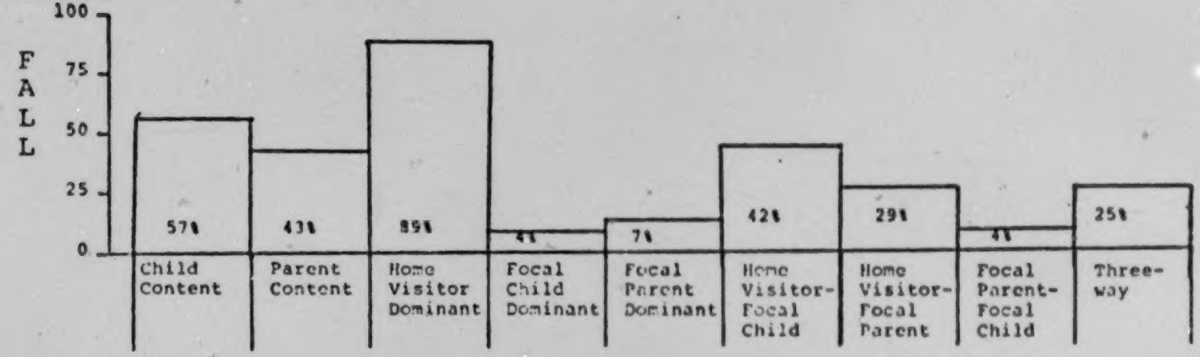
Areas Not Affected By Instrument Change	Spring 1974	Fall 1974
Total Time	71 minutes	72 minutes
Child Content	55%	60%
School Readiness and Reading	24%	26%
Physical Development	23%	26%
Emotional Development	7%	8%
Child Other	0%	0%
Parent Content	45%	40%
Educating the child	12%	9%
Family Health	5%	6%
Family Nutrition	4%	4%
Adult Education	0%	1%
Services	2%	2%
Parental Concerns	16%	15%
Parent Other	5%	3%
Activity Modes		
Home Visitor Tells	55%	64%
Home Visitor Asks	16%	15%
Home Visitor Listens	25%	17%
Home Visitor Ignores	1%	3%
Home Visitor Not Present	0%	0%
Focal Child Tells	50%	52%
Focal Child Asks	2%	3%
Focal Child Listens	20%	23%
Focal Child Ignores	16%	16%
Focal Child Not Present	0%	5%
Focal Parent Tells	33%	31%
Focal Parent Asks	9%	12%
Focal Parent Listens	44%	46%
Focal Parent Ignores	5%	6%
Focal Parent Not Present	6%	4%

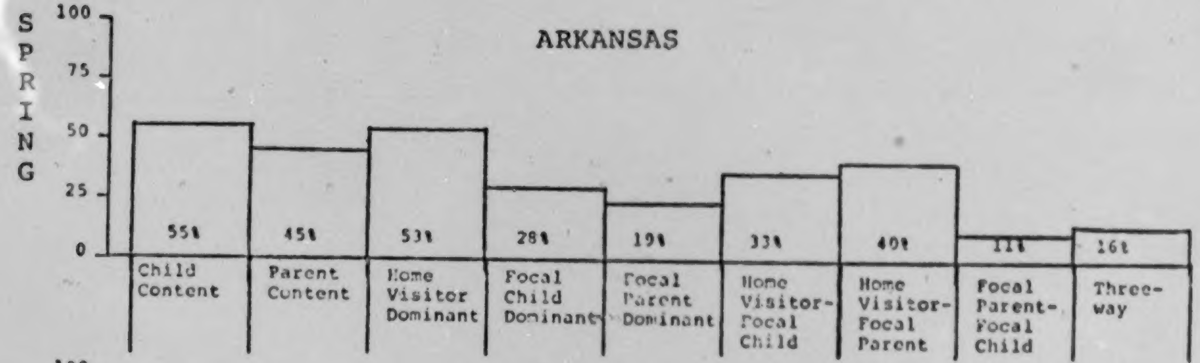
Areas Affected By Instrument Change	Spring 1974 (Dominant)	Fall 1974 (Initiates)
Home Visitor Dominant/Initiates	46%	82%
HV to FP	22%	23%
HV to FC	19%	40%
HV to FP and FC	5%	19%
Focal Child Dominant/Initiates	26%	5%
FC to HV	13%	3%
FC to FP	6%	1%
FC to HV and FP	7%	1%
Focal Parent Dominant/Initiates	22%	13%
FP to HV	12%	6%
FP to FC	8%	6%
FP to HV and FC	2%	1%
HV - FP Interactions	34%	28%
HV - FC Interactions	32%	42%
FP - FC Interactions	14%	7%
Threeway Interactions	14%	21%

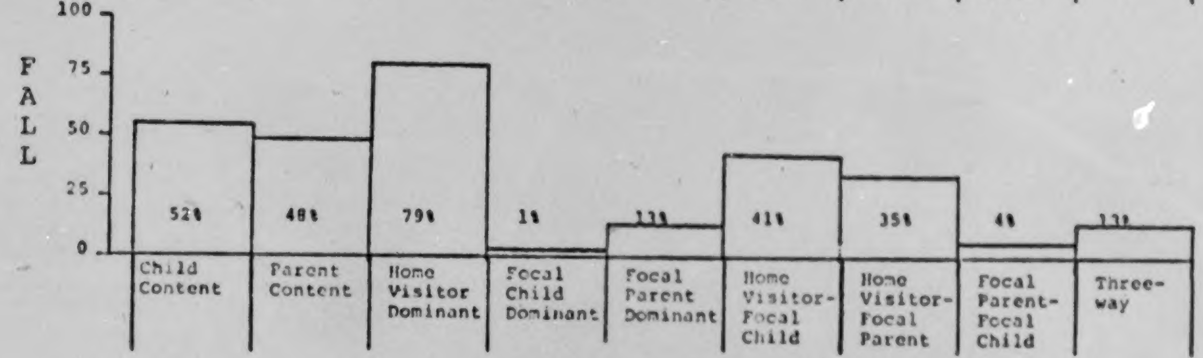
TABLE V-2

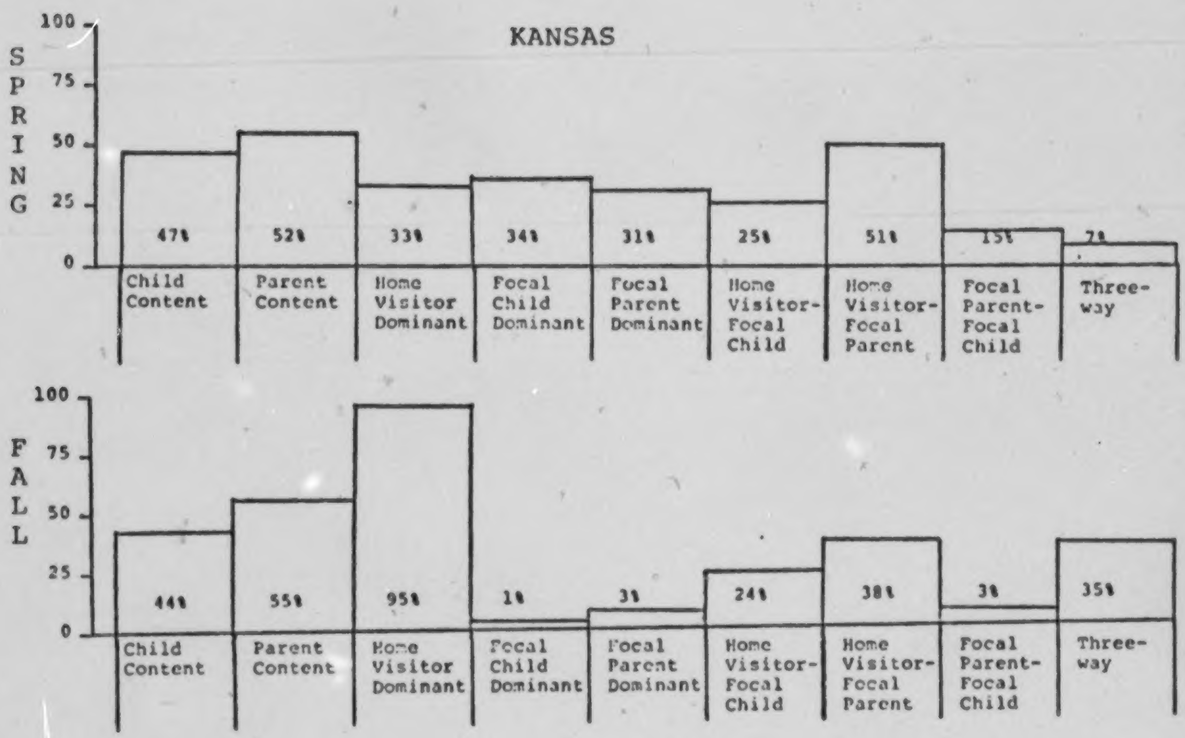
COMPARATIVE HOME VISIT PROFILES BY SITE

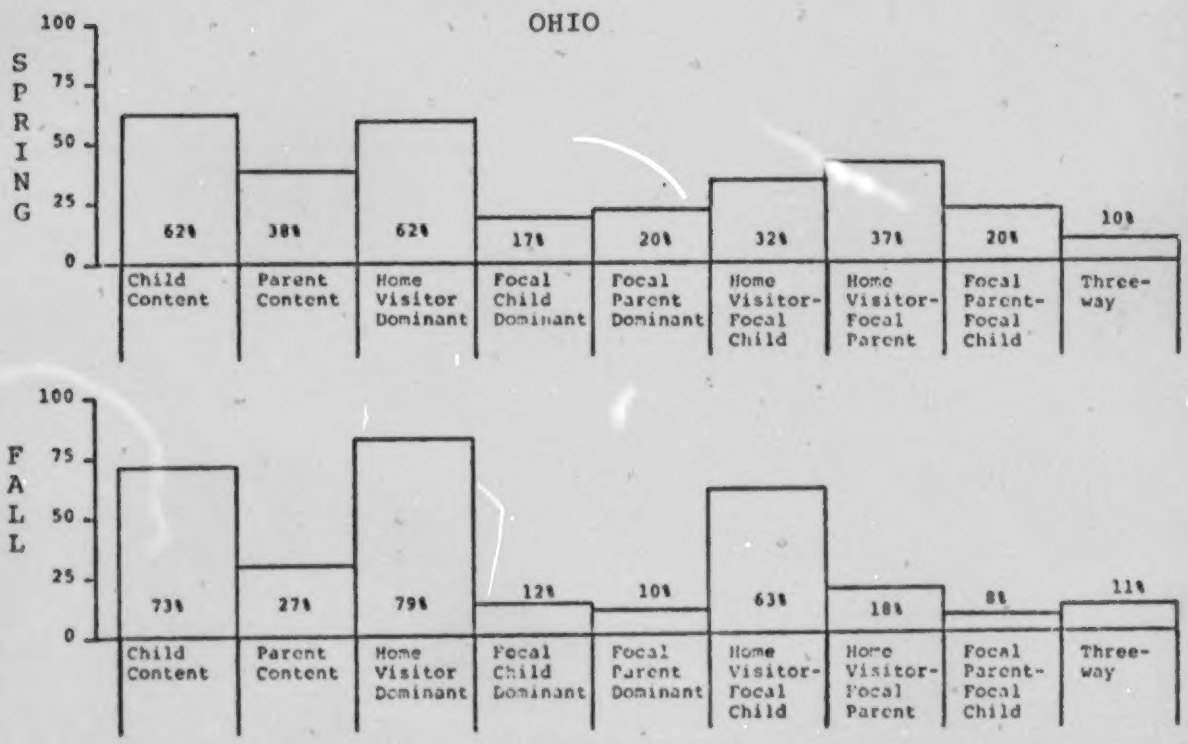


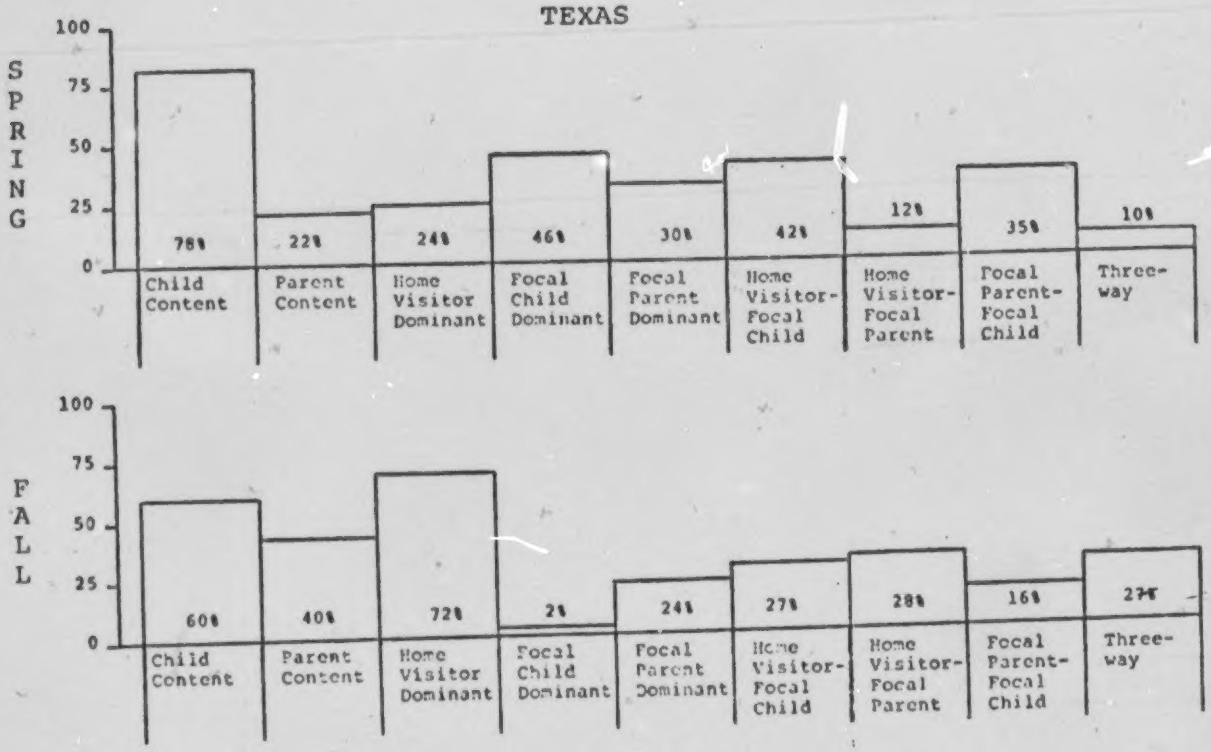







KANSAS
SPRING
100
75
50
25
0
47%
52%
33%
34%
31%
25%
51%
15%
7%
Child Content
Parent Content
Home Visitor Dominant
Focal Child Dominant
Focal Parent Dominant
Home Visitor-Focal Child
Home Visitor-Focal Parent
Focal Parent-Focal Child
Three-way
FALL
100
75
50
25
0
44%
55%
95%
1%
3%
24%
38%
3%
35%
Child Content
Parent Content
Home Visitor Dominant
Focal Child Dominant
Focal Parent Dominant
Home Visitor-Focal Child
Home Visitor-Focal Parent
Focal Parent-Focal Child
Three-way


OHIO
SPRING
100
75
50
25
0
62%
38%
62%
17%
20%
32%
37%
20%
10%
Child Content
Parent Content
Home Visitor Dominant
Focal Child Dominant
Focal Parent Dominant
Home Visitor-Focal Child
Home Visitor-Focal Parent
Focal Parent-Focal Child
Three-way
FALL
100
75
50
25
0
73%
27%
79%
12%
10%
63%
18%
8%
11%
Child Content
Parent Content
Home Visitor Dominant
Focal Child Dominant
Focal Parent Dominant
Home Visitor-Focal Child
Home Visitor-Focal Parent
Focal Parent-Focal Child
Three-way


TEXAS

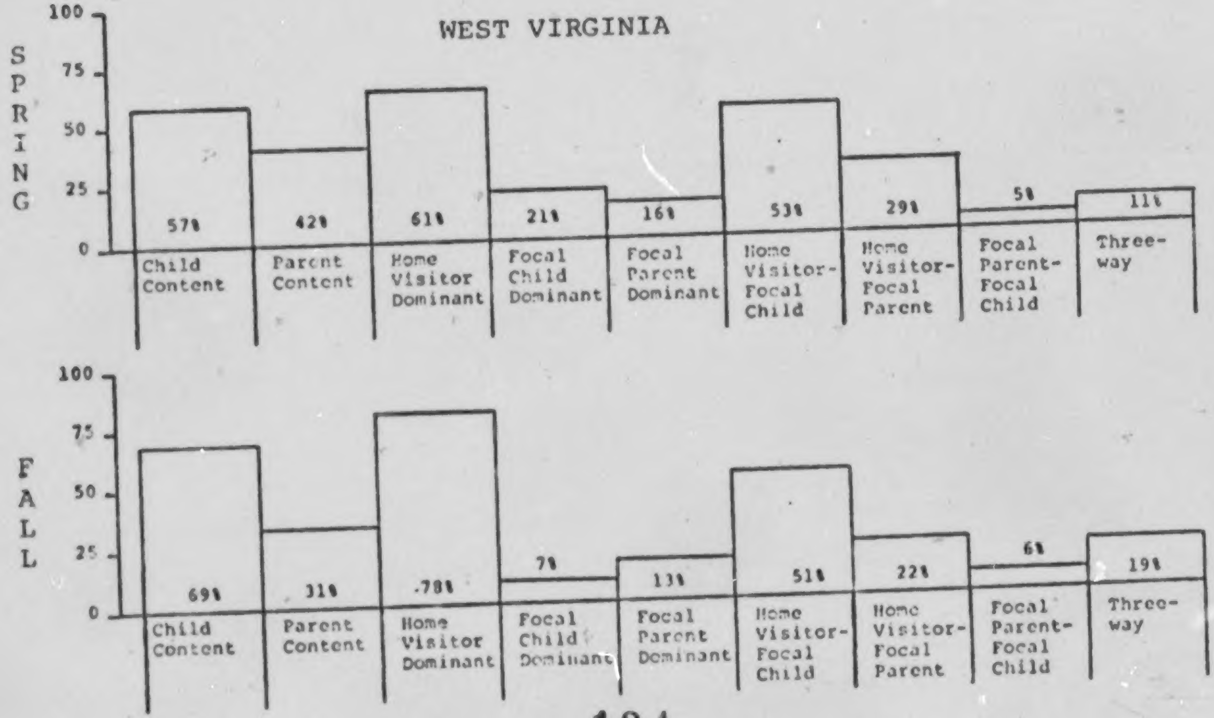
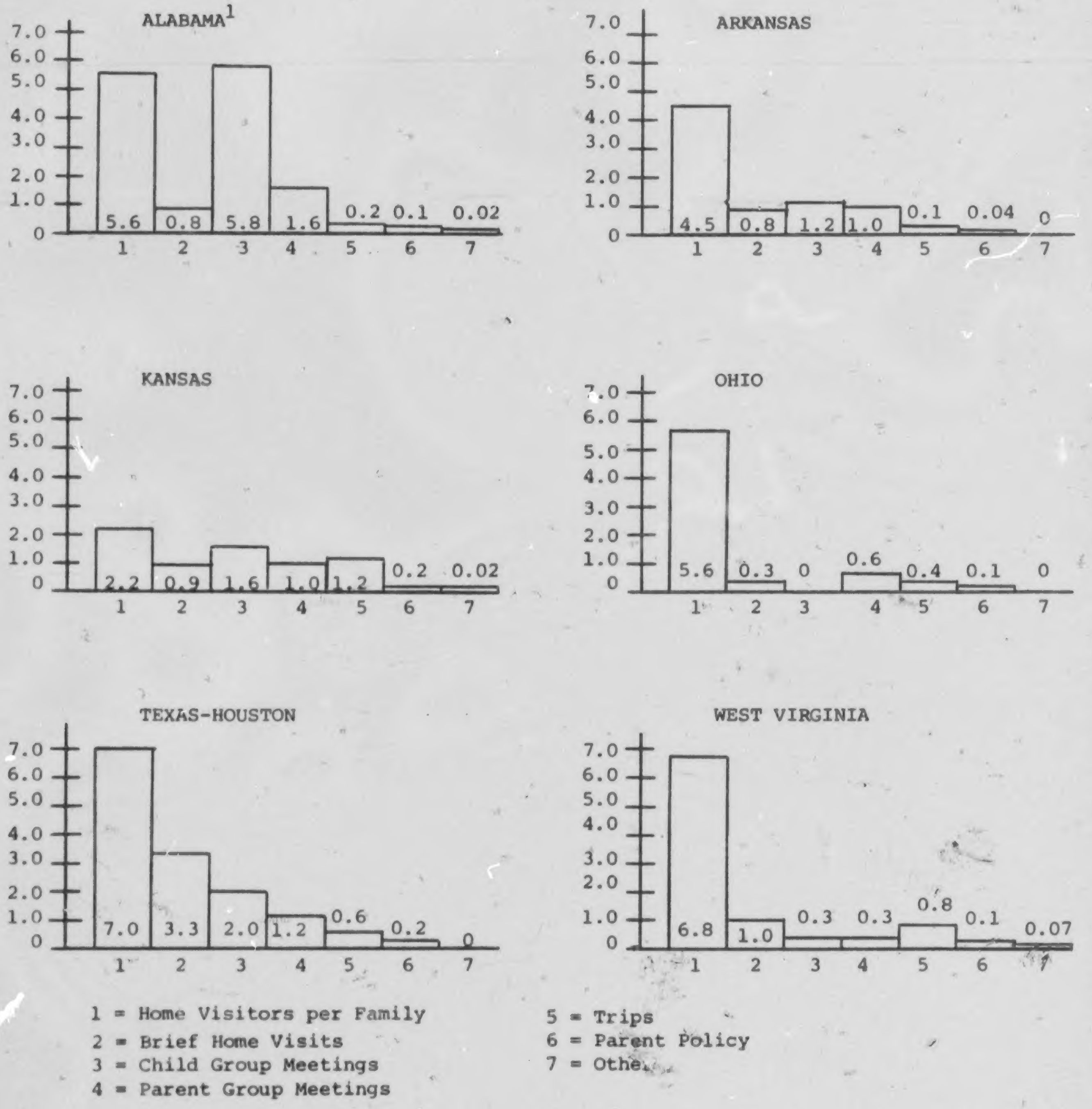

WEST VIRGINIA

TABLE V-3

PROJECT-BY-PROJECT VARIATIONS IN FAMILY TREATMENT

7 week period starting October 1,
ending November 16, 1974



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[1] The Alabama Home Start Project is the only project which has a special staff to conduct group meetings for focal children.

TABLE VI-1

COMPARISON OF SUMMATIVE PROJECTS FEDERAL FUNDS
(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas-Houston	West Virginia	Average
Personnel	75,268	81,700[1]	60,718	101,096[3]	79,800[4]	136,342[5,6]	89,154
Home Visitors	22,717	38,166	40,416	42,478	29,047[4]	70,151[6]	40,496
Other Staff	45,270	35,411[1]	14,257	48,269	42,464	54,837[5,6]	40,084
Fringe Benefits	7,281	8,123	6,045	10,349	8,289	11,354[6]	8,574
Non-Personnel	19,394	22,170[2]	23,676	7,603	18,695	45,939[7]	22,913
Travel	8,280	9,151	7,280	3,327	5,623	24,344[7]	9,668
Space	3,819	528	6,006	-0-	-0-	9,708[7]	3,344
Consumables	3,970	2,258	4,450	1,978	9,833	6,223	4,785
Equipment	218	⟨153⟩	29	134	3,184	598	668
Other	3,107	10,386[2]	5,911	2,164	55	5,066	4,448
TOTAL	$94,662	$103,870[1,2]	$84,394	$108,699[3]	$98,495	$182,281[5,6,7]	$112,067

[1] Included in this total are personnel costs donated to Home Start by Head Start: $10,832
[2] Included in this total are personnel costs donated to Head Start by Home Start: $9,408
[3] Included in this total are personnel costs donated to Home Start by the Center for Human Services: $6,327
[4] Included in this total are personnel costs donated to Home Start by Head Start: $3,887
[5] Included in this total are personnel costs donated to Home Start by a Training Grant: $1,621
[6] Included in this total are personnel costs donated to Home Start by an OEO Grant: $43,915
[7] Included in this total are non-personnel costs donated to Home Start by an OEO Grant: $15,708

TABLE VI-2

COMPARISON OF SUMMATIVE SITES:
PERCENTAGE ALLOCATION OF FEDERAL FUNDS
ACROSS BUDGET CATEGORIES
(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas-Houston	West Virginia	Average
Personnel	80%	79%	72%	93%	81%	75%	80%
Home Visitors	24	37	48	39	30	39	36
Other Staff	48	34	17	44	43	30	36
Fringe Benefits	8	8	7	10	8	6	8
Non-Personnel	20	21	28	7	19	25	20
Travel	8	9	9	3	6	13	8
Space	4	-	7	-	-	5	3
Consumables	4	2	5	2	10	4	4
Equipment	1	-	-	-	3	-	1
Other	3	10	7	2	-	3	4
TOTAL	100%	100%	100%	100%	100%	100%	100%

TABLE VI-3

COMPARISON OF SIX SUMMATIVE SITES: TOTAL RESOURCE COSTS
(OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas-Houston	West Virginia	Average
Personnel	106,311	101,109	66,183	114,510	92,235	161,905	107,043
Home Visitors	22,717	38,166	40,416	42,478	29,047	70,151	40,496
Other Staff	45,270	35,411	14,257	48,269	42,464	54,837	40,085
Donated Professional Time	22,075	13,336	4,665	10,004	11,908	22,372	14,060
Donated Non-Professional Time	8,968	6,073	800	3,410	527	3,191	3.828
Fringe Benefits	7,281	8,123	6,045	10,349	8,289	11,354	8,574
Non-Professional	23,443	34,775	34,536	18,761	28,132	68,361	34,669
Travel	8,280	9,151	7,280	3,327	5,623	24,334	9,668
Space	3,819	528	6,006	-0-	-0-	9,708	3,344
Consumables	7,904	14,863	15,195	13,136	19,180	28,645	16,487
Equipment	218	⟨153⟩	29	134	3,184	598	668
Other	3,222	10,386	6,026	2,164	145	5,066	4,502
TOTAL	$129,754	$135,884	$100,719	$133,271	$120,367	$230,266	$141,712

TABLE VI-4

COMPARISON OF SIX SUMMATIVE SITES: PERCENTAGE ALLOCATION OF TOTAL RESOURCES ACROSS BUDGET CATEGORIES (OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas-Houston	West Virginia	Average
Personnel	82%	74%	66%	85%	76%	70%	75%
Home Visitors	17	28	40	32	24	30	29
Other Staff	35	26	14	36	35	24	28
Donated Professional Time	17	10	5	7	10	10	10
Donated Non-Professional Time	7	4	~1	2	~0	1	2
Fringe Benefits	6	6	6	8	7	5	6
Non-Personnel	18	26	34	15	24	30	25
Travel	6	7	7	3	5	11	7
Space	3	~0	6	-	-	4	2
Consumables	6	11	15	10	16	13	12
Equipment	~1	-	~0	~0	3	~0	~1
Other	2	8	6	2	~0	2	3
TOTAL	100%	100%	100%	100%	100%	100%	100%

TABLE VI-5

COMPARISON OF SIX SUMMATIVE SITES: RESOURCES OBTAINED FROM NON-OCD SOURCES BY TYPE OF RESOURCE (OCTOBER 1, 1973 TO SEPTEMBER 30, 1974)

	Alabama	Arkansas	Kansas	Ohio	Texas-Houston	West Virginia	Average
Cash	115	-0-	115	-0-	90	-0-	53
Professional Time	22,075	13,336	4.665	10,004	11,908	22,372	14,060
Non-Professional Time	8,968	6,073	800	3,410	527	3,191	3,828
Consumable Materials	2,223	1,731	2,030	916	8,659	17,667	5,538
Durable Materials	1,711	10,874	8,715	10,242	688	4,755	6,164
TOTAL	35,092	32,014	16,325	24,572	21,872	47,985	29,643

APPENDIX A

METHODOLOGY: DATA COLLECTION AND ANALYSIS

METHODOLOGY: DATA COLLECTION AND ANALYSIS

In the fall of 1974, site visits were made to each of the six summative Home Start projects: Alabama, Arkansas, Kansas, Ohio, Texas-Houston, and West Virginia. The major objectives of the data collection effort were:

- To obtain information about actual project expenditures for the past year (October 1, 1973, through September 30, 1974.), including both U. S. Office of Child Development grants and levered resources. Actual expenditure data were also collected from Head Start projects in the six summative sites, together with child enrollment data.[1]

- To re-assess the adequacy of the parent/child treatment during the home visit. Additional home visitor background data and home visiting records were obtained during the site visit, and site-specific findings regarding the home visit were shared with and critiqued by project staff.

- To study selected programmatic issues identified in Interim Report V, October 15, 1974. These include studies of:
    - the Home Start program year, to determine whether families are served for the duration of the school year or for a 12-month period;
    - the utilization of selected community resources (Medicaid, Food Stamps, and Food Commodities), to assess the accuracy of the summative data and the extent to which Home Start families are using community resources;
    - the nutrition component of the Home Start projects, to obtain more accurate information about specific activities which home visitors undertake to improve family nutrition.

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[1] While Head Start cost data were reported for four sites only in previous reports, information was also obtained for this report from the Kansas and Ohio Head Start programs who became involved in the evaluation for the first time in the fall of 1974.

Data Collection Instruments

Figure A-1 shows the data collection instruments which were used to obtain information for this volume. The general purpose of each instrument is described in the figure.

Site Visit Staff and Training

The 3-day site visits were conducted by four experienced field staff members; three from Abt Associates[1] and one from the High/Scope Educational Research Foundation.[2] One person visited all six summative sites to collect comparable data on costs and levered resources.

A one-day training session was conducted in Cambridge, Massachusetts for field staff, all of whom had been actively involved in the development of the data collection instruments. No training was provided in the Family Termination Roster, the Home Visitor Background Questionnaire, the Home Visitor Time Use Instrument, the Home Visiting Records, the Community Service Records, and the School Entry Forms since these were self-administered by Home Start project staff. Site visit staff were familiar with the instruments, however, so that they could give technical assistance on site, if needed. Training for the Home Visit Observation Instrument which was administered by community interviewers lasted approximately two days and used role plays as the primary training method.[3] Parent Interview Data reported in the Program Analysis section also were obtained by community interviewers.

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[1] Marrit Nauta, Andee Rubin and Mona Stein

[2] Dennis Deloria

[3] The instruction manual for the Home Visit Observation Instrument is included in Appendix C.

FIGURE A-1

FALL 1974 DATA COLLECTION INSTRUMENTS

Instrument	Purpose	Summative Home Start Projects	Head Start Projects
I. Project Information			
• Director's Interview	The instrument was designed to determine whether Home Start should be viewed as a one- or two-year program.[1] Information was collected regarding the availability of public kindergarten in the different geographic areas being served by the projects, the length of the Home Start project year, and project's staff views regarding the number of months the families should remain in the project. Information was also collected on record use by the projects which is not reported in this volume. It was collected for possible use in obtaining additional data regarding specific services the families are receiving if needed.	X	
• Nutrition Interview	In followup to the findings in the Summative Evaluation Volume of Interim Report V, October 15, 1974, an instrument was developed to obtain specific information regarding the nutrition component of the Home Start projects. The interview covered such areas as the amount of pre- and in-service training provided to home visitors in the area of nutrition, priorities in providing nutrition education to parents, materials used, vitamin use by families, and whether the nutritional intake of families was assessed when they enrolled in the project.	X	
• Family Termination Data	On this instrument, Home Start projects were asked to provide information on every family that was terminated after October 1, 1973. Noted on the form were the enrollment and termination dates, together with the Quarterly Information System Reports, these data were used to determine the average length of enrollment of families.[1]	X	

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[1] Data to be reported in subsequent Home Start Report (VII).

Instrument	Purpose	Summative Home Start Projects	Head Start Projects
II. Cost Information			
• Actual Expenditures	Data were collected regarding the actual expenditures of the projects for the one-year period starting October 1, 1973 and ending September 30, 1974, including payroll data, fringe benefits, travel allowance and expenditures, occupancy, and contractor/consultant services. The data were used to determine the actual cost in federal dollars per focal child, and family for a one-year period. Information regarding enrollment was obtained from the six Head Start projects.	X	X
• Levered Resources	Data were again collected regarding levered personnel and non-personnel resources in order to determine the "total cost" per child.	X	
III. Home Visitor Background (self-administered)	Home visitor background data were collected only for home visitors who joined the project following the spring 1974 data collection. The data were collected in order to determine the effects of home visitor background on the focus and conduct of the actual home visit.	X	
IV. Home Visitor Time Use Information (self-administered)	A simplified version of the spring 1974 Time Use Instrument was developed for home visitors to enable an update of the information that was obtained in the spring regarding the number of home visits that are made during a typical week and the average length of the home visit.	X	
V. Home Visiting Record (self-administered)	In order to determine the actual number of hours the home visitor spends with each of her/his families, an instrument was developed for recording this information weekly. Information is obtained on "summative evaluation" families only. On the record, the home visitor not only indicates how much time was spent home visiting but also the number of parent and child group meetings each family participated in, the number of brief visits, policy council meetings, trips to the doctor, dentist or social service agency, and the number of other activities that the family was involved in. The Record will be used through the remainder of the evaluation and will be submitted with the Quarterly Information System Reports.	X	

Instrument	Purpose	Summative Home Start Projects	Head Start Projects
VI. Community Service Record (self-administered -- in some cases individually with the help of parent)	Also in followup to Summative Evaluation findings reported in Interim Report V, October 15, 1974, a questionnaire was developed to obtain information for all "summative" families regarding their eligibility for and use of Medicaid, Food Stamps and Food Commodities. Home visitors were also asked to state the reason for non-use of the community service if the family is eligible.	X	
VII. Home Visit Observation Instrument	A simplified version of the fall Home Visit Observation Instrument was used to oberve a maximum of three "summative" families per home visitor. Families were randomly selected for observation purposes. The data were collected to determine whether the major interaction patterns and the amount of time spent on various child and parent activities had changed since the spring. The data were also used in the cost effects analysis and in analyses of the effects of home visitor background and the length of time (s)he has been with the family on the home visit.	X	
VIII. School Entry Information (self-administered)	To enable the Office of Child Development to determine the feasibility of extending the Home Start Evaluation beyond the summer of 1975 to study the continuity of effects over time on Home Start children who have gone on to public school, information was obtained regarding the schools the "summative" focal children are likely to enter in the fall of 1975. This information is not reported on in this volume, but has been forwarded directly to policy makers at OCD.	X	
IX. Other Data Sources			
• Quarterly Information System Reports	on families, staff, and referrals from the sixteen Home Start projects	X	
• High/Scope Parent Interviews I & II	regarding focal parent characteristics. Information also was obtained from parents to determine whether or not home visitors visit their families regularly and, if funding allowed, whether families would prefer an increase in the number of weekly home visits as well as an increase in the amount of time spent per visit.	X	

Data Reduction and Analysis

In this section of the report, analysis of the Home Visit Observation data and Home Visitor Background data were performed using extensive computer support. Data from the instruments were coded at Abt Associates and were translated to a machine-readable format through keypunching. Both processes were carefully monitored to reduce the amount of error. Coding was spot-checked for accuracy throughout and all keypunching was verified. Two computer facilities were used to perform analysis: The CDC 6400 at the Smithsonian Astrophysical Observatory (SAO) in Cambridge, Massachusetts, and the IBM 360/67 at the University of Michigan. To compute the relative amounts of time spent from information recorded in the Home Visit Observation, a special program was written using Fortran IV. In addition, many cross-tabs, frequency counts and regressions were run using either the Statistical Package for the Social Sciences (SPSS) at SAO, or the Michigan Interactive Data Analysis System (MIDAS) at the University of Michigan.

APPENDIX B

HOME VISIT OBSERVATION INSTRUMENT

INTER-OBSERVER RELIABILITY

HOME VISIT OBSERVATION INSTRUMENT
INTER-OBSERVER RELIABILITY

Since the analyses regarding in-home treatment of families are based primarily on observations of home visits by a number of specially trained observers, it is important to determine the extent to which the observations were recorded accurately on site. A number of home visit scenarios were developed in the spring of 1974 for this purpose. Two of these scenarios (Nos. II and III) were used again during the fall data collection effort in order to determine inter-observer reliability. The scenarios were role-played on site at specified intervals prior to actual data collection. These scenarios were observed and recorded by all community interviewers (observers) who collected data during the fall. The observations of the community interviewers were compared to determine the extent of agreement/disagreement regarding major interaction patterns between participants and content areas covered during the visit (home visit variables). The results of these comparisons are reported in this section.

In addition to using the scenarios to determine inter-observer reliability, the data were used to identify problems which specific community interviewers were having with observation and recording procedures. Based on the scenario data, the Coordinator of Field Operations provided technical assistance to community interviewers prior to actual data collection.

As was discussed in detail in Interim Report V, the use of home visit scenarios is not the most ideal method for obtaining inter-observer reliability data. Specific problems with the use of the scenarios included: (1) the total length of the scenario and the average length of activities were considerably shorter than in any of the home visits observed on site during the fall; and (2) all roles (home visitor, focal parent and child) were acted out by adults, which created recording inconsistencies between observers because of confusion in terms of who the actors were representing. Although written scripts were used, the role-played scenarios differed considerably from site to site, prohibiting across-site comparisons.

Methodology

During the spring of 1974, a model was developed for the scenarios indicating dominant interaction and content patterns. The observation data for each community interviewer in a site were then compared against a scenario model. Since the role-played scenarios differed so considerably in each site, this method was not used for the fall data collection effort to determine inter-observer reliability. The observation data were used simply to determine the extent of agreement between observers in each of the sites.

Two types of inter-observer reliability are discussed in this section: agreement in terms of (1) the frequency of occurrence of specific home visit variables, and (2) the total time spent on these home visit variables.

(1) Frequency of Home Visit Variables. During the course of the home visit, observers record all interaction patterns that occur during the activity, activity modes which take place (tells/does, listens, ignores, etc.) and parent and child content areas. At the conclusion of the activity, observers indicate the person who "initiated" the activity and with whom, what each of the actors (participants in the home visit) was doing during the course of the activity, and the major focus of the activity. For analysis purposes, a composite was prepared for the entire scenario, combining all of the activities that took place during the visit. For each observer, the frequency of occurrence of specific home visit variables were then ranked and compared against the rankings of other observers in the same site. The three principal variables of the home visit that were ranked include interaction patterns, participant modes, and content area. Figure B-1 shows an example of how the observers in one site ranked interaction patterns for a particular scenario:

Figure B-1: Interaction Pattern Ranking

	Observer I	Observer II	Observer III
HV Dominant	1	2	1
FP Dominant	2	1	2
FC Dominant	3	3	3

To determine inter-observer reliability in terms of frequency of occurrence of home visit variables, a point system was used. In the example above, two observers agreed on the HV Dominant ranking, with one point given to each observer. Since the second community interviewer reversed the ranking of interaction patterns, she was given only one half point, resulting in a total score of 2.5 points for this site on this home visit variable. Had observer II shown the focal child as most dominant, no point would be given. Site points were totalled and divided by the points the site would obtain for 100% agreement of frequency of home visit variables in order to arrive at a percentage of inter-observer reliability.

(2) Total Time Spent on Home Visit Variables. In addition to determining how reliably observers recorded the frequency of home visit variables, a comparison was made to determine the percentage of observer agreement in terms of the amount of time spent on the home visit variables which occurred during the home visit. The mean time spent on a specific home visit variable was first determined using the totals of all observers and dividing it by the number of persons who observed the scenario. Since it is extremely difficult to obtain a 100% agreement on the amount of time spent on specific home visit variables because of the complex nature of the observation instrument, a 2% variation from the site mean was considered an acceptable range for inter-observer reliability. For analysis purposes, the amount of time recorded by each observer was adjusted (plus or minus 2% of the total recorded for a specific home visit variable) to bring it closer to the site mean. The percentage of agreement from the site mean was then calculated for each observer. These were totalled and divided by the total number of observers in order to arrive at an average percent of observer agreement.

Since the procedures used for determining the extent of observer agreement for the scenarios differs from the one used during the spring of 1974, no comparisons can be made between spring and fall reliability data.

Inter-Observer Reliability

Before determining the extent of agreement among observers in terms of frequency of occurrence and the actual amount of time spent on home visit variables, it is important to look at inter-observer reliability in terms of the total time recorded for the entire scenario. There was considerable variation in the total time reported for the home visit scenario within site. On Scenario II, there was a 12% disagreement among observers regarding the total length of the scenario, and 15% on Scenario III.

On the second scenario, the data from two observers deviated considerably from the site mean, as was the case with one observer on the third scenario. Since a substantial difference in the amount of time recorded by one observer seriously affects the inter-observer reliability of the other observers, the resulting observer agreement is extremely low. To show this distortion more clearly, adjusted figures are given to show the extent of agreement among observers if the data from the one person were excluded. Adjusted figures on the total time of the scenario show a 6% disagreement on Scenario II and 11% on Scenario III.

Since the scenario data were collected during the early part of the fall, retraining was provided for these three observers prior to any data collection in the homes of Home Start families.

Tables B-1 and B-2 show an overall inter-observer reliability of 73% for the two scenarios in terms of frequency of home visit variables. Inter-observer reliability was 73% on Scenario II and 72% on Scenario III. Alabama showed the lowest inter-observer agreement (67%) and Arkansas the highest (85%).

Figure B-2 shows that reliability decreases slightly when inter-observer agreement is determined on the basis of the amount of time spent on various home visit variables. More detailed profiles showing the extent of agreement for the two scenarios in terms of time spent on home visit variables are shown in Tables B-3 and B-4.

Figure B-2: Comparison of Inter-Observer Reliability in Terms of Frequency and Time

Scenario #	Frequency of Home Visit Variables	Time Spent on Home Visit Variables
II	73%	71% (79%)
III	72%	69% (74%)
Scenarios I & II	73%	70% (77%)

The figures in parentheses indicate adjusted inter-observer agreement, excluding the data from two observers on Scenario II and one observer on Scenario III. These three observers recorded different amounts of time on various interaction patterns, as was discussed above. Alabama showed the lowest inter-observer agreement on the two scenarios combined (48%) and Arkansas the highest (84%). When adjusted figures are used, Alabama still shows the lowest inter-observer agreement of the six sites (70%).

Summary

The examination of inter-observer reliability indicates that the in-home treatment data obtained during the fall provides only a fairly accurate picture of home visiting activities in each of the sites. The data should be considered primarily as "descriptive" since inter-observer reliability leaves considerable room for improvement on the home visit scenarios.

Table B-1: Inter-Observer Reliability -- Dominant Home Visit Patterns

Scenario II

	ALA	ARK	KAN	OHIO	TEXAS	W. VA.	ALL 6 SITES	% Inter-Observer Reliability
Number of Community Interviewers	5	4	4	2	3	5	23	
HV Dominant	5.0	3.0	3.0	2.0	2.0	4.0	19.0	83%
HV - FP	2.0	2.5	3.5	2.0	3.0	4.5	17.5	76%
HV - FC	2.5	2.5	3.0	1.0	2.0	3.0	14.0	61%
HV Tells	3.0	4.0	2.5	2.0	2.5	4.5	18.5	80%
FC Tells	5.0	3.5	4.0	2.0	3.0	5.0	22.5	98%
FP Tells	3.5	3.0	3.5	2.0	.5	2.5	15.0	65%
Listens	2.5	3.0	2.5	2.0	3.5	4.0	17.5	76%
Child Focus	4.0	4.0	2.0	2.0	3.0	5.0	20.0	87%
Parent Focus	-	-	-	-	-	-	-	
School Readiness	4.0	4.0	2.0	1.0	3.0	5.0	19.0	83%
Physical Development	0	3.0	0	1.0	0	0	4.0	14%
Total Score	31.5	32.5	26.0	17	22.5	37.5	167.0	
% Inter-Observer Reliability	63%	81%	65%	85%	75%	75%		73%

Table B-2: Inter-Observer Reliability -- Dominant Home Visit Patterns

Scenario III

	ALA	ARK	KAN	OHIO	TEXAS	W. VA.	ALL 6 SITES	% Inter-Observer Reliability
Number of Community Interviewers	5	4	4	2	3	5	23	
FP Dominant	4.0	4.0	2.5	0	2.5	4.0	17.0	74%
HV Dominant	4.5	3.0	3.5	1.5	2.0	4.0	18.5	80%
HV - FP	3.5	4.0	3.5	1.5	2.5	4.5	19.5	85%
HV Tells	3.0	4.0	3.5	0.5	3.0	4.0	18.0	78%
FC Tells	5.0	4.0	4.0	2.0	3.0	4.0	22.0	96%
FP Tells	4.0	3.5	4.0	1.0	1.5	4.0	18.0	78%
Child Focus	-	-	3.0	2.0	2.0	3.0	17.0	74%
Parent Focus	4.0	3.0	-	-	-	-	-	
School Readiness/Phy.Dev.	2.0	2.5	4.0	2.0	3.0	5.0	18.5	80%
Concerns/Services	1.5	3.5	3.5	0	3.0	4.5	16.0	70%
Total Score	31.5	31.5	31.5	10.5	22.5	37.0	164.5	
% Inter-Observer Reliability	70%	88%	88%	58%	83%	82%		72%

Table B-3: Inter-Observer Reliability in the Amount of Time Spent on Various Home Visit Patterns -- Scenario II

	ALA	ARK	KAN	OHIO	TEXAS	W. VA.	ALL 6 SITES	% Inter-Observer Reliability
Number of Community Interviewers	5 (4)	4	4 (3)	2	3	5	23 (21)	
Total HV Time	305 (376)	376	361 (293)	192	270	476	1980 (1983)	86% (94%)
HV Dominant	369 (347)	289	289 (206)	200	204	397	1748 (1643)	76% (78%)
HV - FP	169 (328)	376	226 (226)	159	264	475	1669 (1828)	73% (87%)
HV - FC	302 (293)	315	193 (277)	84	240	451	1585 (1660)	69% (79%)
HV Tells	182 (222)	345	326 (300)	190	198	404	1645 (1659)	72% (79%)
FC Tells	308 (381)	283	294 (248)	184	253	472	1794 (1821)	78% (87%)
FP Tells	165 (241)	348	240 (255)	194	182	289	1418 (1509)	62% (72%)
Listens	205 (275)	262	260 (161)	188	250	429	1594 (1565)	69% (75%)
Child Focus	336 (332)	366	220 (205)	175	253	482	1832 (1813)	80% (86%)
Parent Focus								
School Readiness	314 (356)	364	202 (190)	93	259	482	1714 (1744)	75% (83%)
Physical Development	0 (0)	304	206 (112)	4	0	500	1014 (920)	44% (44%)
Total Score	2655 (3151)	3628	2817 (2473)	1663	2373	4857	17993 (18145)	
% Inter-Observer Reliability	48% (72%)	82%	64% (75%)	76%	72%	88%		71% (79%)

Table B-4: Inter-Observer Reliability in the Amount of Time Spent on Various Home Visit Patterns -- Scenario III

	ALA	ARK	KAN	OHIO	TEXAS	W. VA.	ALL 6 SITES	% Inter-Observer Reliability
Number of Community Interviewers	5 (4)	4	4	2	3	5	23 (22)	
Total Visit Time	256 (300)	381	387	173	266	494	1957 (2001)	85% (91%)
FP Dominant	317 (266)	345	205	4	170	341	1382 (1331)	60% (61%)
HV Dominant	105 (345)	377	290	145	206	350	1473 (1713)	64% (78%)
HV - FP	254 (199)	361	359	157	260	291	1682 (1627)	73% (74%)
HV Tells	94 (225)	360	385	188	257	183	1467 (1598)	64% (73%)
FC Tells	276 (317)	353	354	180	235	329	1727 (1768)	75% (80%)
FP Tells	205 (247)	307	343	75	37	212	1179 (1221)	51% (56%)
Child Focus	375 (298)	273	354	161	254	436	1853 (1776)	81% (81%)
Parent Focus								
Physical Development/ School Readiness	89 (236)	325	354	173	263	309	1513 (1660)	66% (75%)
Concerns/Services	357 (261)	335	328	137	244	345	1746 (1650)	76% (75%)
Total Score	2328(2694)	3417	3359	1393	2192	3290	15979(16345)	
% Inter-Observer Reliability	47%(67%)	85%	84%	70%	73%	66%		69% (74%)

APPENDIX C

HOME VISIT OBSERVATION INSTRUCTION MANUAL

HOME VISIT OBSERVATION
QUESTIONNAIRE
AND
OBSERVATION CODING FORMS

INSTRUCTION MANUAL

Prepared by Abt Associates Inc.,
Cambridge, Massachusetts, and the
High/Scope Education Research
Foundation, Ypsilanti, Michigan,
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INTRODUCTION

Observations of home visits will not be done with all families in the Home Start sample. Rather, three families for each Home Visitor will be selected by random sampling procedures for observation purposes.

The observation instrument is designed to collect information about how Home Visitors, parents and children typically interact with each other in a normal Home Start environment: the home visit. On the instruments you record information on the kinds of interactions which take place during the home visit, who interacts with whom, and what topics or activities are part of the visit. In addition you will be recording what the Home Visitor generally thought of the visit, as well as your impresssions of the attitudes and behaviors you observed during the visit.

There are three major parts to the Home Visit Observation Instrument:

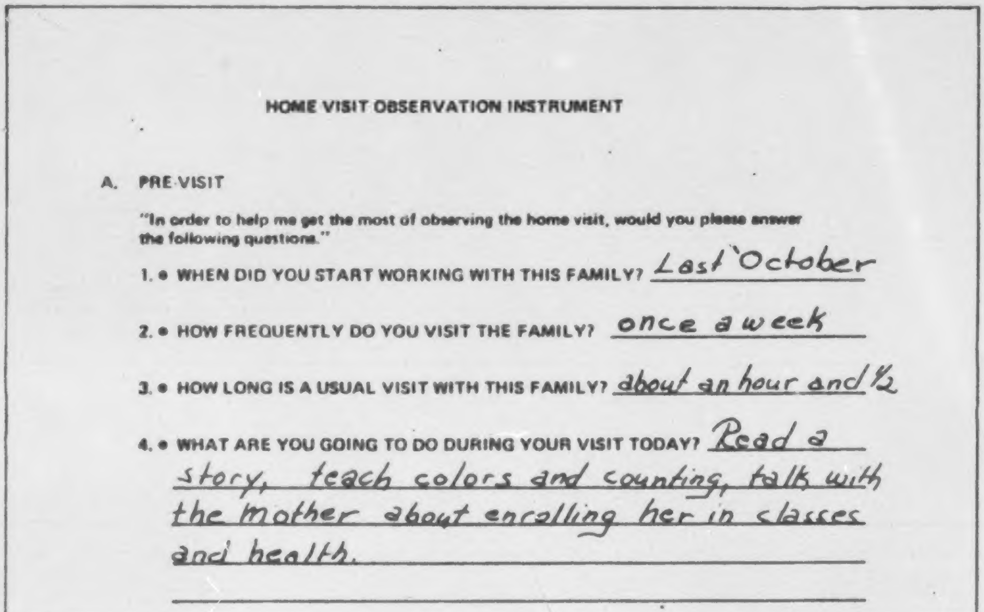
- Home Visitor Pre-Visit Interview and Post Interview
- Impressions
- Observation Coding Sheets (10)

You will not use the instrument in the order it is assembled, however. You start out with the Pre-Visit Interview, then record the home visit activities. After the home visit is over, you administer the Post Interview to the Home Visitor and record your impressions of the people who were involved in the visit.

INSTRUCTIONS

I. HOME VISITOR INTERVIEW (Pre-Visit)

Before you go on your visit, you should complete the front page of the Observation Instrument; i.e., Name of the Focal Child, Name of Focal Parent, Community, Date of the Visit, Your Name, and the Name of the Home Visitor. Arrange to meet the Home Visitor prior to the visit to the family. At that time or while you are driving with her to the family home, you will want to ask the Home Visitor the seven Pre-Visit questions. The Pre-Visit questions, as answered by one Home Visitor, follow to familiarize you with the questions and possible answers the Home Visitor might give you.



HOME VISIT OBSERVATION INSTRUMENT

A. PRE-VISIT

"In order to help me get the most of observing the home visit, would you please answer the following questions."

1. ● WHEN DID YOU START WORKING WITH THIS FAMILY? Last October

2. ● HOW FREQUENTLY DO YOU VISIT THE FAMILY? once a week

3. ● HOW LONG IS A USUAL VISIT WITH THIS FAMILY? about an hour and 1/2

4. ● WHAT ARE YOU GOING TO DO DURING YOUR VISIT TODAY? Read a story, teach colors and counting, talk with the mother about enrolling her in classes and health.

5. ● WHY DID YOU CHOOSE THESE ACTIVITIES? The mother wants to go back to school. WHY TALK ABOUT HEALTH. Oh, the child has frequant colds and should see a doctor. IS THERE A REASON WHY YOU ARE WORKING ON COLORS AND COUNTING WITH THE CHILD? The mother feels that is good because the child needs to know them when she goes to school.

6. ● DID ANYONE HELP YOU PLAN THESE ACTIVITIES? No, I planned them by myself

7. ● HAVE YOU BROUGHT ANYTHING WITH YOU TO TAKE INTO THE HOME?

No ✓ ; Yes ___ WHAT HAVE YOU BROUGHT WITH YOU? ___

As you can see from the example, you need to press for details to find out why the Home Visitor chose the activities she is planning to do. Ask Question #5 as it is printed and write down what the Home Visitor said. If she did not explain why she chose all the activities, you should probe.

Suggested probes for Question #5 are:

WHY ARE YOU PLANNING TO DO ________________________?
(specific activity)

IS THERE ANY REASON WHY YOU ARE GOING TO DO

________________________?
(specific activity)

If the Home Visitor indicates on Question #7 that she has brought materials for the Home Visit, you need to ask her the following question: WHAT HAVE YOU BROUGHT WITH YOU? and record her answer. You do not ask this last question if the Home Visitor said she did not bring anything.

Question #4 should help you to anticipate the number of activities you will be observing for which you will fill out observation coding sheets. During the home visit there may be more activities or different ones from those the Home Visitor planned so you must be ready to recognize unanticipated activities.

II. HOME VISITOR INTERVIEW (Post-Visit)

The Post-Visit questions should be asked of the Home Visitor after the home visit is ended and you have left the family. The questions follow.

B. POST-VISIT (To be completed with Home Visitor after home visit)

1. ● WAS THIS VISIT LIKE PREVIOUS ONES WITH THIS FAMILY?

Yes ____; No ____ WHY? ________________________

____

____

2. ● HOW MUCH WAS THIS FAMILY LIKE YOUR OTHER FAMILIES?

____ VERY MUCH; ____ MORE OR LESS;

____ VERY UNLIKE; HOW IS IT DIFFERENT? ________________________

____

____

(____ They Are All Different)

3. ● DO YOU THINK MY BEING ALONG ON THIS VISIT CHANGED THE WAY YOU, THE PARENT, OR THE CHILD ACTED?

No ____; Yes ____ HOW? ________________________

____

____

After asking Question #2 above, read three responses to the Home Visitor: VERY MUCH, MORE OR LESS, and VERY UNLIKE. Do not read THEY ARE ALL DIFFERENT to the Home Visitor as a response but if she gives this response, mark it.

If the Home Visitor answers No on Question #1, Very Unlike on Question #2, and Yes on Question #3, ask her the question that immediately follows these words.

III. IMPRESSIONS

After you have completed the Post-Visit Interview with the Home Visitor, complete the Impressions Checklists for the Home Visitor, Focal Parent, and Focal Child. Before completing the Participant Checklists, note WHO WAS INVOLVED during the Home Visit. For example, you would indicate that the Mother, Home Visitor, the Focal Child and three Siblings were involved.

The checklists in this section were modeled after the Pupil Observation Checklist (POCL) which you may have completed previously on the Focal Child. Fill out this checklist based on your observations of the person during the Home Visit. Note that the child behavior may be different during testing sessions and a normal home visit. That is why two checklists are completed for the Focal Child.

Using the same procedures you learned in administering the POCL, check the box on the scale between each item which best represents the behavior and attitudes you observed during the visit.

IV. OBSERVATION CODING SHEETS

You will be filling out one Observation Coding Sheet for each activity you observe during the Home Visit. There may be from 6 to 10 activities during any home visit. These sheets are the only forms you will fill out while you are in the home with the family.

After you have greeted the family, explain to the focal parent that you will only be watching during this home visit and that you would like for them to take part in the Home Visit as usual, as if you were not there. It is important that you STRESS this to the focal parent.

Explain that we are interested in seeing how Home Visitors work with parents and children and what kinds of activities are part of the home visit. You may explain that you will not be scoring anyone for performance or right answers. You will simply record what happens.

Find an unobtrusive place to sit where you can see and hear what is happening, but where children will not be tempted to draw you into the home visit acitivites.

How to Begin

- At the top of the page, indicate, by circling the appropriate number, which activity you are observing. For example, if this is your second activity, circle #2.

ACTIVITY No. 1 [✓ 2] 3 4 5 6 7 8 9 10

- Indicate the time you started observing the visit (which should be as soon as possible after you have entered the home and have explained the purpose of your visit to the parent). You need to fill out the time started at the top of each new activity page, but you need not indicate the time stopped until the end of the last activity of the home visit.

- Check the location of the activity. You need to indicate this for each new activity since the location in which the activity is conducted may change. Do not leave it blank.

Time: ______/______
Started Stopped*

Location: ____Living Room; ____Dining Room; ____Kitchen; ____Outside; ____Other

Who to Watch

In the family you visit, there may be more than one child or more than one adult present (in addition to the Home Visitor) during the home visit. For this observation, you will only watch the actions of three people: Home Visitor, Focal Parent and Focal Child.

Focal Child:	regardless of the number of children present, record only the actions of the child who is listed on your Family Assignment Sheet as the Focal Child.
Focal Parent:	regardless of the number of adults present, record only the actions of the Focal Parent who appears on your Family Assignment Sheet.

How to Recognize Activities

An activity is generally defined as a set of actions concerning a particular game or project, or a conversation on a general or specific topic. For example, one activity might center around the making of a number chart; it might last for 5 minutes or more. Another activity might be a conversation between the mother and the Home Visitor about employment; it might last only 2 or 3 minutes.

You will begin to record on a new observation sheet if:

(a) The content of the activity changes; and/or

(b) The control of the activity shifts.

Let's look at some examples so that you clearly understand what is meant by a change in content and control.

(a) Content Changes

Examples:

- The Home Visitor is doing a puzzle with the child for about 5 minutes. The Home Visitor then puts the puzzle away and starts reading the child a story. When the Home Visitor starts reading, you should start a new activity sheet.
- The child is identifying shapes and colors with the Home Visitor. After 6 minutes, the child goes out of the room and the Home Visitor starts talking with the mother about evening classes for her so that she can get her G.E.D. When the child leaves the room and the parent and Home Visitor start discussing parent education, you should have started a new activity sheet.

Sometimes it is not possible to change activity sheets when the content of the activity changes for the following reasons: (1) you are constrained by time; and (2) two activities may be going on at the same time. Here are some examples of (1) and (2).

Examples:

- (1) The Home Visitor comes into the door and socializes with both the parent and the focal child. This lasts about one minute. The Home Visitor then takes out a book and starts reading it to the child. Although this is a change in the content of the activity (from Emotional Development/Personal and General Concerns to Reading), it is not possible for you to start recording the reading part on a new activity sheet.
- (2) The Home Visitor takes out some materials and starts explaining to the Mother what the game is for. The child listens while the Home Visitor explains the game for a little while. The Home Visitor then turns to the child and explains the game to both parent and child. While the child is doing the game, the Home Visitor stresses the importance of the game to the mother. Since the Parent Activity (Training Parent in Child Education) and the Child Activity are going on simultaneously, it is not possible to change activity sheets.

Let's look at a different example which shows how an activity like the one described above could have been coded on two activity sheets:

The Home Visitor takes out some materials and starts explaining to the mother that this is an excellent game for the child to learn her colors and shapes. The Home Visitor spends about 5 minutes with the parent explaining the game, while the focal child is listening. The Home Visitor then requests that the Parent do the game with the focal child. The Parent and child are involved in the game for about 6 minutes. Here you can consider the game as two separate activities - the first with the parent (Training Parent in Child Education), and the second with the focal child (School Readiness). Since the parent activity was lengthy, you should have started a new activity sheet when the parent started teaching the child.

(b) Control Changes

Here we are specifically interested in who initiates and/or controls the activity. In the last example used with the Home Visitor first teaching the parent and the parent then doing the game with the child, the control of the activity changed (from Home Visitor to the parent) although it can be said that the content of the activity remained the same (they were still involved in the same game). If time allows, you should change activity sheets, when the control of the activity changes or if another person starts to initiate an activity. Let's look at another example:

- The Home Visitor and parent are socializing and talking about the weather for a period of time. The parent then starts to discuss how little money she has to make ends meet. They talk about the family's financial problems for about 4 minutes. The Home Visitor then suggests that the parent seek employment to supplement the family income. In this activity, the parent initiated the first conversation. The conversation about employment, however, was initiated by the Home Visitor. If time allows, a new activity sheet should be filled out although the content of the activity remained the same (Personal and General Concerns).

An activity must involve at least two individuals from among the basic three actors in the home visit: the parent, the focal child and the Home Visitor. If all three actors are doing something by themselves (for example, the Home Visitor is out of the room, the Mother is changing diapers, and the Focal Child is making a picture) and there is no interaction between two or more of the actors, all should be recorded as "Uninvolved." Although this "uninvolvement" cannot really be classified as an activity, it is important that you record it as such so that we find out the total amount of time in which no interaction took place.

How to Use the Observation Coding Sheets

The Observation Coding Sheet is divided into three sections:

A. Interactions among Home Visitor, Focal Child and Parent. In the first section of A, you record who initiated the activity with whom or who controlled the activity. In the second section, you record what each person was doing most during the activity.

B. The Content of Child and Parent Activities.

C. Summary of Activity.

For each activity sheet you should:

A. 1st section

- Check as many initiations as occurred during the activity. Circle the one check which was most dominant during the activity.

A. 2nd section

- Check as many categories as occur during the activity for each of the three actors and circle the one check for each person to indicate what each person did most of the time.

B. Content

- Check as many topics for children and parents as you observe and circle the one topic that was the major emphasis of that activity.

C. Summary

- Summarize the activity briefly and indicate whether or not materials were used. Also answer the two questions at the bottom of the page.

A. Interactions

In Section A, you will be able to check what each person is doing during the activity. In addition, you will check who did most of the interacting during that particular activity and with whom.

- For each of the three people involved in the activity, check what they are doing (tells, etc.). In the following example, the Home Visitor tells/explains/shows/does/reads/sings while the Focal Child and Parent listen/watch

Tells/Explains/Shows/Does/Reads/Sings	✓ HV	___ FC	___ FP
Questions/Inquires/Probes	___ HV	___ FC	___ FP
Listens/Watches	___ HV	✓ FC	✓ FP
Uninvolved/Ignores	___ HV	___ FC	___ FP
Not Present	___ HV	___ FC	___ FP

CHECK ONE IN EACH COLUMN

- For each person one check when the activity is coming to a close, circle to indicate what that person was doing most of the time during the activity.

  For example: The Home Visitior explains to the child how to use finger paints, for about 1 minute and then asks the child to make a picture. The child is finger-painting for about 5 minutes, while the Home Visitor is watching. Here you would circle for the child "Tells, ... etc." and for the Home Visitor "Listens/Watches" since that is what they did most of the time.

EXAMPLE: The Home Visitor is asking the child to count; the child tries; but needs some help from the Home Visitor who explains counting to her one more time. The mother was out of the room for most of the activity, but she listened and watched while she was in the room.

Tells/Explains/Shows/Does/Reads/Sings	✓ HV	[✓ ✓ FC]	___ FP
Questions/Inquires/Probes	[✓ ✓ HV]	___ FC	___ FP
Listens/Watches	✓ HV	✓ FC	✓ FP
Uninvolved/Ignores	___ HV	___ FC	___ FP
Not Present	___ HV	___ FC	[✓ ✓ FP]

CHECK ONE IN EACH COLUMN

A coding pattern like this would indicate that the HV was mostly Asking/Inquiring; the F Child mostly Telling/Explaining/Showing/Doing/Reading/Singing; and the F Parent mostly not present during the activity.

The five interaction categories in the 2nd Section of A are mostly self-explanatory, with the possible exception of:

Uninvolved/Ignores	- the person is totally not involved, not paying attention to the activity or completely ignoring what is said or requested
Not Present	- the person is out of the room during part or all of the activity

If the parent and Home Visitor are discussing employment and the child is simply listening, the child should be shown as "uninvolved" with the activity. If, however, the child is watching the Home Visitor show a game for the child to the parent, you should record the child as listening and watching.

Sometimes, the Home Visitor will be working with a sibling or talking to someone other than the Focal Child and Focal Parent. As long as two of the principal three actors (Home Visitor, Focal Parent, Focal Child) are involved in an activity, you record what those two people were doing. The Home Visitor would be shown as not present or uninvolved in the activity. If two of the principal actors are not involved in an activity, you should follow procedures outlined below:

1. Home Visitor is uninvolved with Focal Child and Parent; Focal Child is playing outside (doing something either related or unrelated to Home Start) and the Parent is changing diapers or doing wash - record the total time the actors were uninvolved and score it as an activity. You would check and circle for all three actors Uninvolved.

During the activity, you check who is initiating/controlling to whom in the first section of A. You may have from one to nine checks in this top section of A. When the activity comes to a close, you need to circle the one check showing who did most of the initiating/controlling during the activity. Let's look at some examples.

Example:

- The Home Visitor takes out a book and starts to read the child a story about the zoo (place a check in the HV to C box to show that the Home Visitor initiated the activity). They spend most of the time reading. At the end of the activity, you would circle the checkmark placed in the HV to C box.

A.

HV→P		FC→HV	✓	FP→HV		CHECK ONE
HV→C	✓	FC→P		FP→C		
HV→P & C		FC→HV & C		FP→HV & C	✓	

- The Focal Parent talks with the Home Visitor about how little money they have and how much difficulty she has in making ends meet (FP to HV). They talk about financial problems for about 4 minutes. The Home Visitor then suggests that the parent seek employment to supplement the family income. They disucss job possibilities for about 5 minutes (HV to FP). When the activity comes to a close, you would circle the one check which represents who initiated most of the activity to whom (probably HV to P because more time was spent on the conversation about employment).

HV→P		FC→HV		FP→HV	✓	CHECK ONE
HV→C	✓	FC→P		FP→C		
HV→P & C		FC→HV & C		FP→HV & C	✓	

B. Child Activities; Parent Activities

In this section, you will be checking topics that are covered in a single activity.

- Check all the topics in the following section which you observe as part of the activity recorded on this page.

Usually there will be more than one topic during each activity. Mark topics that concern the Focal Child and those that concern the Parent.

Child Activities are those activities that involve the child. They can be initiated by the child herself, the Focal Parent or the Home Visitor. Parent activities on the other hand are only those activities which either the Home Visitor or Focal Parent start or in which both of them are involved.

If the Home Visitor is doing a cutting and pasting game with the Focal Child, the Focal Parent is listening and watching, you only check Physical Development in the Child Activities column, nothing in the Parent Activities column.

In order for Parent Activity to be checked, there must be verbal conversation between the Home Visitor and Focal Parent regarding a topic. For example, if the Home Visitor and Focal Child are cutting and pasting and the Home Visitor explains to the Focal Parent why this exercise is so important for the child, you would check Physical Development and Training Parent in Child Education. So if the Home Visitor brings a book for the Mother to read to the child and says anything to the parent about the book you check Training Parent in Child Education.

EXAMPLE: Suppose the child is pasting autumn leaves on a paper and the Home Visitor is talking with her about Fall.

B. **Child Activities**

✓ School Readiness (Basic Concepts, Languages, Musical, Environment)

  ___ Reading

✓ Physical Development (Fine Motor, Gross Motor, Health, Nutrition)

___ Emotional Development (Socializing, Self Image)

___ Other

Parent Activities

___ Training Parent in Child Education

___ Family Health/Nutrition

___ Parent Education

___ Services (Social, Welfare, Legal, Employment)

___ Personal and General Concerns

___ Other

CIRCLE ONE CHECK

EXAMPLE: The HV brought in a game and explains it first to the Focal Parent. The Focal Parent then does the counting game with the child.

B. **Child Activities**

✓ School Readiness (Basic Concepts, Languages, Musical, Environment)

  ___ Reading

___ Physical Development (Fine Motor, Gross Motor, Health, Nutrition)

___ Emotional Development (Socializing, Self Image)

___ Other

Parent Activities

✓ Training Parent in Child Education

___ Family Health/Nutrition

___ Parent Education

___ Services (Social, Welfare, Legal, Employment)

___ Personal and General Concerns

___ Other

CIRCLE ONE CHECK

Brief descriptions of child and parent activities are:

Child Activities

___ School Readiness - including Basic Concepts, Language, Musical, Environment

  Basic Concepts - identification of letters, colors, numbers, words, sounds, shapes, prepositions, matching, comparisons;

  Language - activities specifically intended to develop child's use of language; while all verbal communication can be said to be practice of language, this topic refers only to games or exercises which have been planned for language development: talking about pictures. Reading a story would be checked separately;

  Musical - singing, playing instruments, listening to records;

  Environment - activities concerning nature, community local people like firemen, policewomen; taking walks, planting seeds;

___ Reading - reading stories

___ Physical Development - including Fine Motor, Gross Motor, Health, Nutrition

Fine Motor - cutting, coloring, pasting, finger play, painting, building blocks;

Gross Motor - exercises, active games, outdoor play, balancing, walking in a straight line;

Health - discussions or activities that discuss *with the child* simple health measures such as brushing teeth, washing hands, safety, etc.

Nutrition - activities which *involve children* in talking about eating and foods, like cutting out breadfast foods, talking about likes and dislikes and whys;

___ Emotional Development - Socializing and Self-Image

Self-Image - discussions or games about how children see themselves, identifying body parts, emotions.

Parent Activities

___ Training Parent in Child Education

- refers to conversations between the Focal Parent and the Home Visitor about the Focal Child or other children. They can talk about activities the Focal Parent can do with the child and why, discussions about problems one of the other children is having in school, reviewing the lesson plan, etc. This would include discussions about the child's educational needs, problems, etc. In order for this category to be checked, the Home Visitor needs to explain the activity to the mother, why it is important, etc. If the mother simply watches the Home Visitor doing an activity with the child, this category would *not* be checked.

___ Family Health/Nutrition

Health - general preventative information, specific treatment plans, or discussions regarding general health of the family. This category would also be checked if *safety* were discussed, such as keeping medicine bottles in a place where children cannot reach it. It also includes discussions about what to do in a tornedo, etc.

Nutrition - general information on meal planning, food buying, canning, family eating habits, making vegatble garden, etc.

_____ Services - discussions regarding agencies which provide services and people who provide assistance or donate goods or services. This category would be checked if the FP and HV discussed Food Stamps (Agency), the Employment Agency or the lady at the volunteer center who has some extra clothes to give away to needy families. This category would not be checked if the HV and FP simply discuss employment problems, for example. This is a Personal and General Concern. Only if the HV or FP discuss the employment agency should this category be checked. If the HV and Parent discuss marital problems, Personal and General Concerns is checked. If, however, the HV suggests that the couple go to the Mental Health Clinic for counseling, Services would be checked.

If Health, Nutrition and Education Services are discussed by the HV and FP, do not check services since there is a separate category for recording these topics.

_____ Personal and General Concerns

- including discussions about various kinds of problems - housing, marriage, etc. which do not specifically relate to any of the categories listed above. Also included here would be time spent socializing.

For any single activity, several topics from the above lists may be checked. There may be only child-related topics in an activity, only parent-related topics, or both.

NOTE

Attention to topics being covered within an activity is your best guide to when one activity ends and another begins.

Often, it may appear to you that two activities are taking place at once. For example, the HV started the child on a puzzle and then starts talking with the parent while the child is still working on the puzzle. Do not code this as one activity. You should have started to fill out an activity sheet when the Home Visitor started talking about something not related to the activity. In this example, the child is shown as uninvolved in the second activity since the child is no longer involved in the interaction.

If the conversation between HV and FP is related to the activity being conducted, you would record it on the same activity sheet.

Should such an interaction between the mother and Home Visitor continue for a long time, say, 10 minutes or longer, you should consider it a separate activity and fill out another Observation Coding Sheet for it.

There is no way to make a rigid rule about defining when one activity ends and another begins. The more familiar you become with the instrument and with the examples used in training, the more you will be able to trust your judgment in using the Observation Coding Sheets.

The following examples illustrate how to indicate topics for Child and Parent Activities.

An activity may concern topics primarily for the child.

EXAMPLE: The Home Visitor suggests that they make a breakfast food chart for the child to hang on the refrigerator. She has brought a blank sheet of paper and scissors; she and the child cut pictures of breakfast food out of magazines in the home. The child pastes the pictures on the paper while the Home Visitor talks with her about what she likes for breakfast, why milk is important, where orange juice comes from, how food helps the child grow, how tall the child is, how the child has grown or changed.

Child Activities

___ School Readiness (Basic Concepts, Languages, Musical, Environment)

  ___ Reading

[✓] Physical Development (Fine Motor, Gross Motor, Health, Nutrition)

✓ Emotional Development (Socializing, Self Image)

___ Other

Parent Activities

___ Training Parent in Child Education

___ Family Health/Nutrition

___ Parent Education

___ Services (Social, Welfare, Legal, Employment)

___ Personal and General Concerns

___ Other

CIRCLE ONE CHECK

The categories checked in Section B for this single activity would be:

Physical Development	- cutting, pasting, nutrition
Emotional Development	- discussion of relation of food to growth, changes in child's body (arms longer, feet bigger)

In the example above, the chief topic would be Physical Development. The checkmark for Physical Development is circled to indicate that the Home Visitor primarily focused on this.

An activity may concern topics primarily for the parent.

EXAMPLE: Suppose the Home Visitor suggests to the parent that they make a food chart that will help the parent keep track of what the family, and especially the focal child, eat for one week. The Home Visitor has brought some nutrition materials and together they make a simple food chart for the family. While they are making the chart, they talk about family eating habits; they talk about the surplus food program which the parent has never used and isn't eager to apply for. The Home Visitor tells her about the application process and mentions that families of another Home Visitor have met in one home to try some surplus food recipes. They talk about the possibility of organizing a similar group meeting among the families of this Home Visitor.

Child Activities

___ School Readiness (Basic Concepts, Languages, Musical, Environment)

  ___ Reading

___ Physical Development (Fine Motor, Gross Motor, Health, Nutrition)

___ Emotional Development (Socializing, Self Image)

___ Other

Parent Activities

___ Training Parent in Child Education

✓ Family Health/Nutrition

___ Parent Education

✓ Services (Social, Welfare, Legal, Employment)

___ Personal and General Concerns

✓ Other

CIRCLE ONE CHECK

Topics checked for this activity would include:

Family/Health/Nutrition	- Major focus of the activity and circled
Services	- Food Stamps is a "Service"
Other	- Discussion of group meetings with other Home Start Families

An activity may concern topics for both parent and child but only one topic can be a major topic whether it be for the child or for the parent.

EXAMPLE: Let's go back to the first activity described. Suppose the Home Visitor is making the food chart about breakfast foods with the child and talking about food and growth. During the cutting and pasting, the Home Visitor talks with the mother about the child's eating habits and mentions application for the Surplus Food Program. The parent is active in the discussion with the Home Visitor about nutrition while she watches the Home Visitor and the child makes the food chart. Although the parent is involved in the activity, the focus of the activity is still on the child.

Child Activities

___ **School Readiness (Basic Concepts, Languages, Musical, Environment)**

  ___ **Reading**

[✓ **Physical Development (Fine Motor, Gross Motor, Health, Nutrition)**]

___ **Emotional Development (Socializing, Self Image)**

___ **Other**

Parent Activities

___ **Training Parent in Child Education**

✓ **Family Health/Nutrition**

___ **Parent Education**

✓ **Services (Social, Welfare, Legal, Employment)**

___ **Personal and General Concerns**

___ **Other**

CIRCLE ONE CHECK

Because the child remained the focus of the activity, the chief topic of the activity would be Physical Development, as circled. Again the major topic is determined by the emphasis of conversation or activity. In all activities there should be only ONE chief topic.

C. Summary of Activity

This section is for you to describe briefly the activity you are observing, and the materials used. Most activities you will observe will take 10 minutes or less. There will be times when little is happening and you can fill in the brief summary of the activity and the materials used. These summaries should be done with as few words as possible; they will be used to assist in tabulating the observation coding sheets.

EXAMPLE: Let us return to the example of the Home Visitor and the child making a food chart with pictures cut out from magazines in the home. In that example, the Home Visitor brought scissors, paste and blank paper.

C. Summarize Activity: cutting, pasting pictures from magazines to make breakfast food chart

Materials Used: ___ None; ___ Provided by Home Visitor; ___ In Home
✓ Both in Home and Provided

Describe: scissors, paste, paper by H.V.
magazines – in Home

If materials are toys or games, and you are not sure whether or not they were supplied by the Home Visitor, make a note to check it with the Home Visitor after you have left the home.

In addition to the brief summary, there are two questions on the bottom of the observation coding sheet which you must answer. They are:

DID THE HOME VISITOR OR PARENT DISCUSS THINGS THE MOTHER DID SINCE THE LAST HOME VISIT?

Yes ___; No ___

DID THE HOME VISITOR OR PARENT DISCUSS THINGS TO DO BEFORE THE NEXT VISIT?

Yes ___; No ___

On the first question, you will check YES if the Home Visitor, Parent or Child discuss what they have done since the last visit. This might include:

- the parent talking about the good recipe the Home Visitor gave her last week;
- the child showing the Home Visitor a picture she and her mother have made during the week or the child discussing how they have practiced coloring or counting;
- the Home Visitor asking parent and child whether they worked on colors during the past week;
- the Home Visitor may ask the mother whether she did any of the activities suggested in the lesson plans she left with her last week.

These are just a couple of examples. Be sure you check the first question when it occurs during the activity and not after the activity has been completed.

On the second question, you will check YES if the Home Visitor and/or parent discuss things the mother should or plans to do before the next visit. This might include:

- the Home Visitor suggesting that the mother continue to do puzzles with the child everyday to improve fine motor skills or any other activities;
- the Home Visitor urging the mother to contact the health department to set up an appointment for the child or herself;
- the parent indicating that she really plans to read more with the child during the coming week and to have her talk about pictures to improve her language skills;
- the Home Visitor may also leave a lesson plan with the mother and explain what activities are suggested for the mother to do in between the visits.

Again, these are just a few examples of what the parent or Home Visitor might mention.

If no past or future activities are mentioned, check NO for both questions. DO NOT LEAVE THEM BLANK.

DO NOT FORGET TO RECORD THE TIME STOPPED FOR THE FINAL ACTIVITY OF THE HOME VISIT and to go back to the Post-Interview and Impressions.

After the visit, you should double check the entire observation instrument to make sure you have filled out all appropriate blanks. Review the observation sheets to make sure you have indicated with a circle a major mode of interaction for each of the three participants in Section A and who was the major interactor.

Check to see that you have circled the major topic for the Child and Parent Activities in Section B (only one per activity).

Check to see that you have briefly described the activity, and materials used in the activity. Check to see that you have answered the two final questions on each of the Observation Coding Sheets.

SUMMARY

After you have left the family home, you need to complete a summary sheet for the entire Home Visit. If you completed 8 activity sheets in the home, use your 9th activity sheet for this purpose. Without referring to the other activity sheets which you completed in the home, fill out the following information for your summary:

1. 1st Section of A - indicate with one check the person who did most of the initiating and controlling and with whom.
2. 2nd Section of A - indicate with one check for each of the three actors what they were doing most of the time.
3. B. Check the one content which was the major focus of the Home Visit. If there were a wide range of activities for the child, but cannot decide on any one of the child activiity categories to show the major focus of the visit, you may circle the words "Child Activities" as is done in the following example.
4. Summarize the visit briefly, and indicate what materials were used during the visit.

SUMMARY

Time: ____/____
Started Stopped*

Location: ___ Living Room; ___ Dining Room; ___ Kitchen; ___ Outside; ___ Other

A.

HV → P		FC → HV		FP → HV		CHECK ONE
HV → C		FC → P		FP → C		
HV → P & C	✓	FC → HV & C		FP → HV & C		

CHECK ONE IN EACH COLUMN

Tells/Explains/Shows/Does/Reads/Sings	✓ HV	✓ FC	___ FP
Questions/Inquires/Probes	___ HV	___ FC	___ FP
Listens/Watches	___ HV	___ FC	✓ FP
Uninvolved/Ignores	___ HV	___ FC	___ FP
Not Present	___ HV	___ FC	___ FP

B. [✓ Child Activities] Parent Activities

CIRCLE ONE CHECK

Child Activities:

___ School Readiness (Basic Concepts, Languages, Musical, Environment)

___ Reading

___ Physical Development (Fine Motor, Gross Motor, Health, Nutrition)

___ Emotional Development (Socializing, Self Image)

___ Other

Parent Activities:

___ Training Parent in Child Education

___ Family Health/Nutrition

___ Parent Education

___ Services (Social, Welfare, Legal, Employment)

___ Personal and General Concerns

___ Other

C. Summarize Activity: HV Worked with both Focal child and Parent on Basic concepts, Gross Motor. HV. showed Parent why it is important to read to child

Materials Used: ___ None; ✓ Provided by Home Visitor; ___ In Home
___ Both in Home and Provided

Describe: Crayons, checkers, blocks, book with different shapes

DID THE HOME VISITOR OR PARENT DISCUSS THINGS THE MOTHER DID SINCE THE LAST HOME VISIT?

Yes ___; No ___

DID THE HOME VISITOR OR PARENT DISCUSS THINGS TO DO BEFORE THE NEXT VISIT?

Yes ___; No ___

Was this your FINAL ACTIVITY? If so go back to the front of the booklet to complete Post-Interview and Impressions.

*complete only for *last* activity

APPENDIX D

SUMMATIVE DATA QUALITY

Marrit Nauta
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The discussion of the quality of the Home Start data is organized in three sections. The first section discusses the fall sample and total attrition from the sample since the fall of 1973. It is followed by a discussion of characteristics of families who participated in the fall evaluation. The second section discusses the field operations used for obtaining fall data and presents the order of instrument administration, time required for administration of the measurement battery, parental reactions to testing, and conditions of testing. It also focuses on problems that were encountered during the fall data collection effort. The last section discusses the quality of data, inter-judge scoring reliability, measurement administration errors, and the incidence of missing data. All three sections provide comparisons of the quality of data collected this fall with the spring 1974 data.

The Sample

Before discussing sample attrition, it should be noted that only a portion of the total number of children enrolled in Home Start and Head Start in the six summative sites were involved in the National Home Start Evaluation. In fall 1973, when pretest data were collected, 47% of the total number of families enrolled in the six summative Home Start projects were participating in the evaluation. This was in accordance with the research design for the National Home Start Evaluation which specified that half of the families served by the projects be part of the sample. Participation in the evaluation in fall 1973 ranged from 27% in West Virginia which serves twice as many families as the other five projects to 71% of family enrollment in Ohio. In fall 1974, when Control Group families entered Home Start, the percentage of families participating in the evaluation increased to 72% for the six summative projects combined. This ranged from 59% of the total number of families served in Houston, Texas (which enrolls a large number of non-English-speaking families) to 84% of total family enrollment in Arkansas. The primary reason why the entire sample of families were not involved in the evaluation (as was specified in the research design) was considerable sample attrition (see discussed below). Site figures indicating the percentage of families participating in the evaluation are presented in Table D-1. Home Start Information System reports for the quarters ending December 31, 1973 and 1974 were used to determine total family enrollment during the fall evaluation periods.

Participation by Head Start families in the Home Start Evaluation was considerably lower than for Home Start, primarily because Head Start has higher family enrollment. In fall 1973, with four Head Start projects participating in the evaluation (Alabama, Arkansas, Houston, Texas, and West Virginia), 7% of the total number of Head Start children served were part of the sample. In fall 1974, participation in the evaluation increased to 8% resulting from the addition of two Head Start projects in the fall (Kansas and Ohio). It should be noted that since no quarterly enrollment data were obtained from Head Start, the total number of different families served during the year beginning October 1, 1973 and ending September 30, 1974 were used to compute these figures. If comparable figures were used for Home Start (total number of different families served during the year), only 29% of the families were involved in fall 1973 and 43% in fall 1974. Site figures for Head Start participation are presented in Table D-2.

Sample Attrition

Following the spring data collection effort, it became apparent that family attrition during the summer would be extremely high because a large number of children from all three groups were scheduled to enter kindergarten or another preschool program in the fall. For these children "12-month" test data were obtained immediately after they were enrolled so that their kindergarten experience would not effect their scores.

Total attrition from the original sample was 35% for the three groups of families combined -- 32% for control, 36% for Home Start, and 37% for Head Start families. In order to insure a sufficiently large sample for spring 1975 testing, 100 families who were recruited for enrollment in Home Start during the summer of 1974 were included in the sample to supplement the former control group. In addition, 75 new Head Start families were added to the sample in the fall (34 in Kansas and 41 in Ohio). Head Start families in these two communities were not involved in previous evaluation because the program serves families for only a one-year period as compared with two years in the other four sites.

Table D-3 shows the number of families by group remaining from the original sample, together with total attrition figures for each of the groups by site. A comparison of fall/spring and spring/fall attrition by group and by site is presented in Table D-4 and reasons for non-participation in the fall evaluation in Table D-5 for Home Start and control families. The major reasons for non-participation were (1) the focal child entering kindergarten or another preschool program and (2) the family moving away from the service area. Table D-4 shows the fall 1974 sample together with the total number tested of focal children who entered kindergarten.

A majority of the families (95.8%) who were involved in both the fall 1974 and the fall 1973 evaluations were also in the spring 1974 sample. Of the entire fall 1974 sample, 6.3% of the control, 2.5% of the Home Start, and 4.5% of the Head Start families were not involved in spring evaluation activities. Table D-5 shows the number of families by group and by site on which only fall 1973 and fall 1974 data were obtained.

Effects of Attrition on the Sample

Tables D-8 through D-10 present a comparison by group of the families who remained in the sample with those who dropped out. Table D-11 is a comparison of the remaining Home Start families with the remaining control group families. The data reported in these tables are whole scores from the fall 1973 testing period that is the pre-treatment scores. The objective of these analyses was to determine if there are any systematic characteristics associated with attrition. As reported in Interim Report IV, there were no significant entering differences between the Home Start and control group families on any of the whole scores. All comparisons reported in Tables D-8 through D-11 were tested in a two-way analysis of variance design using unweighted means (Veldman, 1967). Site and the interaction of site with group were incorporated in the analysis of variance design as blocking factors; tests on these factors are not reported.

Age attained significance in the comparisons of both the Home Start and Head Start groups with families dropping out of the sample having the older children. Since both programs are designed for young children this is not an unexpected result. Ages of children in the two groups of control children are nearly equal. The PSI scores of the children who dropped out of Home Start were significantly higher than those who remained. Although not significant, the same relationship held for Head Start children. This difference is most likely a result of the older children dropping out of the sample since the PSI scores are related to age. Another significant difference in the Home Start sample was that the families who dropped out were more likely to live in a city than the families who remained in the program. In the control group children who remained in the sample were significantly taller than those who dropped out. The comparison of remaining Home Start families with remaining control group families resulted in no significant differences on any of the individual whole scores. There was an interesting trend in the Home Environment variables however. The Home Start families had higher means than the control group families on all of these variables.

Characteristics of Families Sampled

Table D-12 presents the demographic characteristics of the children who have been in the evaluation since fall 1973. The number, age, and sex of focal children and their siblings are presented by group within site. In addition the table shows the average number of focal children and siblings per family.

This fall there were 359 focal children who remained in the evaluation. They ranged in age from 38 to 80 months with most of the children falling in the 4 - 5 1/2 year old age range. The mean age in months of Home Start, control and Head Start children were 58.7, 58.6, and 57.1 respectively. The mean ages by site ranged from 52.5 in Ohio to 62.9 in Alabama. This range is compatible with the Spring 1974 data.

Only 27 siblings who had been previously tested remained in the evaluation this fall - 17 from Home Start and 10 from the control group. They ranged in age from 41 months to 81 months with 17 falling in the 4 - 4 1/2 year old group. The site mean age ranged from 50.3 in West Virginia to 66.5 in Texas. Except for Arkansas where there were almost twice as many boys as girls, sex distribution remained well balanced for both focal children and siblings.

Table D-13 presents the employment patterns for those families who had been previously tested. The general trend is toward a slight increase in the overall rate of unemployment, 32% in fall 1974 vs 31.4% in spring 1974. The overall difference is somewhat misleading due to a decrease of about ten percentage points in Kansas, from 58% to 48.7%. The number of families with two members employed follows the same pattern, decreases at most sites but an increase in Kansas. At Texas the number of employed mothers nearly doubled from spring to fall, 16.7% to 31.6%. Kansas had an increase in this category of about 8 percentage points, from 25.5% to 33.4%. The biggest difference in families with the mother as sole support was in Alabama where there was a decrease for Home Start and control families and an increase for Head Start families resulting in an overall site decrease of about six percent, 19.3% in spring and 13.3% in the fall. Since occupation, education, and SES are relatively stable over short time periods the data required to calculate scores for these variables were not collected in the fall.

Table D-14 presents the same demographic data as Table D-12 but for the focal children and siblings who just entered the evaluation this fall. There were 176 new focal children. There were new controls from every site for a total of 101 and a total of 75 new Head Start children from only those sites where Head Start children had not previously been tested, Kansas and Ohio. These children were mainly between 3 1/2 and 5 years old; the actual range was 37 to 68 months. The mean age of the new children was 51.2 months for control and 52.5 months for Head Start. Arkansas' children had the lowest mean age, 49.0 and Alabama the highest, 61.7.

Forty-six siblings - 20 in Home Start and 26 in the control were added this fall. They ranged in age from 25 to 68 months with most falling in the 3 - 4 year old categories. The mean age of the Home Start siblings was 42.6 months and the control mean was 43.1 months. West Virginia had the lowest mean, 40.1 months, and Alabama had the highest, 47.7 months. The male/female ratio was 93/83 for focals and 26/20 for siblings.

Field Operations

Field Organization and Training

No changes were made to the field organization for the Home Start evaluation as described in Interim Report V: Summative Evaluation Results, October 1, 1974 (pp. 16-18). In all sites, except Cleveland, Ohio and Houston, Texas, the data collection effort was staffed by a site coordinator and from 3 to 5 community interviewers. In Cleveland, two community interviewers were responsible for all data collection activities and for monitoring each other's performance weekly. In Houston, Texas, a significant turnover of field staff since the spring[1] necessitated a change in the field organization in that site. Site coordination activities were shared by two persons - one responsible for all scheduling of testing visits; the other for monitoring testing visits and checking data quality. This created some problems in terms of communications between the site coordinator, community interviewer, and Home Start staffs.

In order to start data collection on focal children entering kindergarten and on Head Start children in Kansas and Ohio immediately following their enrollment, it was necessary to conduct the field staff training conference earlier than usual (late August as compared with late September in the fall of 1973). Since the training site was available only for a limited number of days, training for site coordinators, trainers and community interviewers was reduced considerably. Training for site coordinators and trainers was conducted for 1 1/2 days instead of 4 and community interviewer training for 5 days instead of 6. This affected data quality to some extent, although interjudge reliability on the Preschool Inventory (PSI) and the Denver Developmental Screening Test (DDST) remained high. PSI figures continued to be a significant improvement over fall 1973 inter-judge reliability.

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[1] Attrition of field staff between spring and fall was 24% as compared with 37.5% during the fall/spring period.

The change in the date of the training conference also affected start-up operations in all of the sites. During previous data collection efforts, community interviewers began testing immediately following training. Full-scale testing for community interviewers who joined the field effort for the first time this summer did not start until two weeks following training to give them additional opportunity to practice the measurement battery. Prior to start-up, this group of community interviewers participated in a comprehensive one-day review session which was conducted on site by the site monitor who also accompanied the community interviewers on their first testing visits. Since some data needed to be collected during the first two weeks of the evaluation (kindergarten families and new Head Start families in Kansas and Ohio), some testing was conducted by site coordinators. See Table D-13 for the number of children, by group within site, tested by each community interviewer and the site coordinators.

Fall Testing Visits

During the spring data collection effort, families were visited at "equal" intervals from the time the fall 1973 data was collected. A different procedure was followed for fall 1974 data collection. Families were grouped and visited during the specified time periods noted below:

Group I
Weeks 1 & 2 - control, Home Start and Head Start children entering kindergarten or another preschool program & Head Start children in Kansas and Ohio (for pre-test data);

Group II
Weeks 3 - 5 - control families entering Home Start and new Home Start families who did not participate in previous evaluation efforts; and

Group III
Weeks 6 - 9 - Home Start and Head Start families who remained in the same program they were in last spring.

As is shown in Table D-16, 39% of the families were not tested during the specified time period for both the first and second evaluation visits. The percentages varied considerably by groups of families - 9% of the Home Start, 35% of the kindergarten, 42% of the control and new Home Start, and 62% of the Head Start families were not tested during the specified time periods. The reasons why not a greater percentage of the families were tested on a timely basis are: (1) rosters of kindergarten families were incomplete, and (2) family enrollment rosters for Head Start in Kansas and Ohio and new Home Start enrollment information were submitted later than had been requested. This delay lengthened the total data collection period from a planned 10 weeks to 14 weeks.

Unsuccessful visits. There was a slight increase in the number of unsuccessful visits that were made to families (166 in the fall compared with 157 in the spring). While the number of unsuccessful visits to Home Start and control families dropped, they increased for Head Start families. Nine families were dropped from the evaluation because three or more unsuccessful visits had been made to the family. In the spring, five families were dropped from the sample for these reasons.

Order of instrument administration. Community interviewers were instructed to follow the order of instrument administration noted below. They were permitted, however, to modify it if circumstances made it necessary.

First Visit

- Preschool Inventory - Focal Child and Sibling
- Height and Weight - Focal Child and Sibling
- Parent Interview I - Focal Parent
- Schaefer Behavior Inventory - Focal Parent
- Food Intake Questionnaire - Focal Parent
- Home Environment Scale - Focal Parent

Second Visit

- Denver Developmental Screening Test - Focal Child
- 8-Block Sort Task - Focal Parent and Child
- Parent Interview II - Focal Parent

Following Visits

- Tester Logs
- Mother Behavior Observation Scale
- Pupil Observation Checklist
- Focal Parent Observation Checklist

Battery Length

The mean time for each test as well as the total child, parent and battery time is presented in Table D-17 for the three groups and total sample (fall and spring). The mean child time was 3 minutes less than last spring, and despite the changes made on the parent interview, the mean parent time only gained 1 minute. Thus the total battery time averaged a couple of minutes less than last spring.

Conditions of Testing

Information gathered about testing conditions is summarized for the three groups and the total sample in Table D-18. In addition, the spring means are included for comparison purposes.

The percentage of sessions where mothers were present (84.1%) closely matches the figure from the spring (84.9%). As would be expected, since Head Start children were tested in the center rather than the home, fewer Head Start mothers were present at testing sessions. The percentage of Home Visitors or teachers present dropped for Home Start and Head Start, although it remained the same for the Control group. The overall result was that the mean number of people present at testing dropped slightly from the spring figures.

Head Start had more problems with noise as compared to the other groups, but just the opposite was true for problems other than noise. However, comparable to last spring, less than 25% of the testing sessions were noted to be noisy and in less than 15% were other difficulties noted (such as child refusal or interference).

Like last spring, nearly 100% of the Home Start and Control testing took place in the home. Sixty - seven percent (as compared to 81% in the spring) of the Head Start children were tested at the centers. Over half of the testing that took place in the home occured in the livingroom. Testers generally worked on a large table and/or the floor as they did last spring.

Parental Reaction to Testing

As in the past there were very few complaints about the testing from the parents. The actual distributions of the complaints that were voiced are presented by instrument in Table D-19.

Problem areas. Start-up of Head Start testing activities in Kansas created some difficulties. A number of children selected for participation in the evaluation had to be eliminated from the sample since they had recently been given the Preschool Inventory. Most of the Head Start children are administered the PSI immediately upon enrolling in the program. Although a request had been made to hold off with center administration for the PSI, some center testing was conducted because of a delay in Head Start roster submission.

Head Start staff in Kansas also had less involvement in evaluation activities than in the other five sites. 69.4% of the testing visits to Head Start families were conducted in the family home, rather than in the center as compared with 24.3% of all testing visits in the five other communities. Prior to the testing visits to Head Start families in Kansas, the site coordinator made visits to each of the families selected for the evaluation to explain Head Start's involvement and to obtain the parent's permission for testing.

Problems with the 8-Block Sort Task continued, although there were fewer tapes that could not be used because of faulty operation of the taping equipment. Five parents refused to participate in the 8-Block, while they consented to answer questions on all other measures.

Data Quality

Monitoring of Data Quality

Site coordinators were again responsible for monitoring the performance of each community interviewer weekly during the entire fall data collection effort. Experienced community interviewers were accompanied on their first testing visits by the site coordinator, while new community interviewers were accompanied by a site monitor from Abt Associates Inc. following a thorough review session and a two-week practice period. Before community interviewers would be permitted to test without supervision, technical assistance was given to those community interviewers whose performance on measurement administration and scoring was not satisfactory.

Inter-judge reliability. Inter-judge reliability of scoring between community interviewers and site coordinators/monitors decreased slightly on both the PSI and the DDST since last spring. This was primarily the result of a shorter-than-usual training period for field staff. Inter-judge reliability stayed well above fall 1973 figures, however, for the PSI and remained the same for the DDST. Table D-20 shows a comparison of spring and fall inter-judge reliability.

Table D-20: Comparison Spring-Fall Inter-Judge Reliability

Instrument	Spring '74	Fall '74	Fall Site Range
PSI	97.9%	97.6%	96.4% - 99.6%
DDST	95.5%	95.1%	92.6% - 98.6%

On the PSI, 48.4% of the scoring discrepancies were in the actual scoring of the child's response; 35.9% in indicating whether or not the child's response was verbal; and 15.7% in writing in the child's verbal response in the margin. The discrepancies were fairly evenly distributed amongst PSI items. On the DDST, three items accounted for 62% of the discrepancy in inter-judge reliability. The items were: Balancing on one Foot, and the Forward and Backward Heel-to-Toe Walk. The reasons for the discrepancies are: (1) the site coordinator "estimates" the balancing on one foot since she does not have a stop watch, and (2) for the walking items, the community interviewer is in a more advantageous position to see the child's movements than the site coordinator.

On the 8-Block Sort Task, discrepancies in inter-judge reliability averaged 2.4 placements per 8-Block administration. This is a decrease in discrepancies since the spring. Over half (61.3%) of the discrepancies were in placements the focal parent made, and 34.9% in child placements. The remaining 3.8% were errors in recording the child's final response (3.3%) and punishments (0.5%).

Measurement administration errors. As is shown in Table D-21, there was also a slight increase in the number of administration errors on most of the measures. This fall's data quality continues to be higher than data collected in the fall of 1973. Table D-21 shows spring and fall averages of administration errors for each measure, together with site ranges and the total number of administrations for each measure that were monitored. The type of administration errors made on each of the measures can be broken down by error category. Noted in Tables D-22 through D-24 are percentages of the total number of administration errors for each of the categories. Table D-22 presents the breakdown of administration errors for the PSI and DDST; Table D-23 for the 8-Block; and Table D-24 for the parent questionnaires and the Height and Weight.

Incidence of Missing Data

Table D-24 presents the incidence of and reasons for missing data for each test. For the total sample, the percentage of instruments with missing data decreased from 4.3% to 2.9%. Analysis by group shows that on the two child tests (PSI and DDST) the number of child refusals and hence, missing data, decreased sharply for the control group. These results have positive implications for the social effects of the Home Start and Head Start programs.

Summary

The factors examined to assess the quality of the summative data lead to the conclusion that this fall's data are of comparable or higher quality than last spring's. Characteristics of the sample remained stable while the administration errors and incidence of missing data remained at the same level or decreased.

TABLE D-1

PERCENTAGE OF TOTAL NUMBER OF FAMILIES SERVED WHO WERE PART OF SAMPLE HOME START

	Fall 1973	Fall 1974
ALABAMA	48%	83%
ARKANSAS	50%	84%
KANSAS	54%	75%
OHIO	71%	82%
TEXAS-Houston	53%	59%
WEST VIRGINIA	27%	62%
SIX SITES COMBINED	47%	72%

TABLE D-2

PERCENTAGE OF TOTAL NUMBER OF FAMILIES SERVED WHO WERE PART OF SAMPLE HOME START

	Fall 1973	Fall 1974
ALABAMA	13%	9%
ARKANSAS	7%	4%
KANSAS	N/A	10%
OHIO	N/A	*
TEXAS-Houston	4%	3%
WEST VIRGINIA	22%	13%
FIVE SITES COMBINED	7%	8%

*No enrollment figures were obtained for the Ohio Head Start Program

TABLE D-3

FALL SAMPLE AND TOTAL SAMPLE ATTRITION

	# of families by group who remained in sample				Total attrition from original sample			
Site	Control Group	Home Start	Head Start	Total	Control Group	Home Start	Head Start	Total
ALABAMA	25	30	20	75	29%	27%	31%	29%
ARKANSAS	20	36	20	76	35%	10%	46%	30%
KANSAS	17	22	N/A	39	61%	40%	N/A	48%
OHIO	10	27	N/A	37	29%	44%	N/A	40%
TEXAS	8	19	27	54	47%	49%	29%	40%
WEST VIRGINIA	30	26	22	78	21%	35%	42%	33%
TOTAL	110	160	89	359	32%	36%	37%	35%

TABLE D-4

COMPARISON OF FALL/SPRING AND SPRING/FALL SAMPLE ATTRITION

Site/Group	Fall '73 Sample	Spring '74 Sample	Fall '74 Sample	Fall/ Spring Attrition	Spring/ Fall Attrition	Total Sample Attrition
ALABAMA						
Total	106	90	75	15%	17%	29%
Home S.	41	36	30	12%	17%	27%
Control	36	30	25	17%	17%	31%
Head.S.	29	24	20	17%	17%	31%
ARKANSAS						
Total	108	89	76	18%	15%	30%
Home S.	40	39	36	3%	8%	10%
Control	31	23	20	26%	13%	35%
Head S.	37	27	20	27%	26%	46%
KANSAS						
Total	73	49	38	33%	22%	48%
Home S.	45	28	27	38%	4%	40%
Control	28	21	11	25%	48%	61%
Head S.	N/A	N/A	N/A	N/A	N/A	N/A
OHIO						
Total	62	43	37	31%	14%	40%
Home S.	48	32	27	33%	16%	44%
Control	14	11	10	21%	9%	29%
Head S.	N/A	N/A	N/A	N/A	N/A	N/A
TEXAS						
Total	90	69	54	23%	22%	40%
Home S.	37	27	19	27%	30%	49%
Control	15	11	8	27%	27%	47%
Head S.	38	31	27	18%	13%	29%
WEST VIRGINIA						
Total	116	94	78	19%	17%	33%
Home S.	40	30	26	25%	13%	35%
Control	38	34	30	11%	12%	21%
Head S.	38	30	22	21%	27%	42%

REASONS FOR NON-PARTICIPATION
HOME START AND CONTROL FAMILIES

	Family Moved		Mother Working		Lack of interest in Program		Child in other Preschool Program		Family could not be reached		Parent Refused Permission		Illness in Family		Family Problems		Other Miscellaneous Reasons		Total # of Families Non-Participating in Evaluation	
Site	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S
ALABAMA	2	4	1	0	1	0	4	2	2	0	1	0	0	1	1	0	2	4	14*	11
ARKANSAS	2	2	0	0	0	1	4	1	0	0	1	0	1	2	0	0	1	3	9*	9
KANSAS	1	5	1	0	2	4	4	7	2	0	1	0	0	0	1	2	2	8	14*	26
OHIO	6	11	0	0	0	3	1	1	0	0	0	1	0	0	1	0	0	3	8*	19
TEXAS	2	6	0	0	1	2	7	1	0	0	1	0	0	0	0	1	0	4	11	14
WEST VIRGINIA	3	9	0	0	0	1	2	0	0	0	2	0	0	0	0	0	1	4	8	14
TOTAL	16	37	2	0	4	11	22	12	4	0	6	1	1	3	3	3	6	26	64	93

* Total number of families who didn't participate is higher than actual family attrition figures due to a number of families re-entering the sample after not having been involved in the spring 1974 evaluation.

TABLE D-6

FALL 1974 SAMPLE*

Site	New Home Start**	Control	Home Start	Head Start	Total
ALABAMA	9	25 (8)	30 (3)	20 (1)	84 (12)
ARKANSAS	11	20 (3)	36 (9)	20 (1)	87 (13)
KANSAS	17	17 (6)	22 (1)	34 (0)	90 (7)
OHIO	25	10 (5)	27 (6)	41 (0)	106 (11)
TEXAS	17	8 (1)	19 (2)	27 (3)	71 (6)
WEST VIRGINIA	22	30 (9)	26 (10)	22 (0)	101 (19)
TOTAL	101	110 (32)	160 (31)	164 (5)	535 (68)
% of families entering Kindergarten		29%	19%	3%	13%

* Figure in parentheses indicates the number of children in this group who entered kindergarten or another preschool program

**New Home Start families who entered the program in the fall of 1974 who did not participate in previous evaluation efforts

TABLE D-7

NUMBER OF FAMILIES ON WHICH ONLY FALL 1973 AND 1974 DATA IS AVAILABLE

Site	Control	Home Start	Head Start	Total
ALABAMA	5	0	0	5
ARKANSAS	0	1	0	1
KANSAS	1	2	0	3
OHIO	1	1	0	2
TEXAS - Houston	0	0	2	2
WEST VIRGINIA	0	0	2	2
TOTAL	7	4	4	15
	6.3%	2.5%	4.5%	4.2%

TABLE D-8

COMPARISON OF HOME START FAMILIES RETAINED IN SAMPLE WITH HOME START FAMILIES DROPPED

Variable	Retained N	Retained Mean	Dropped N	Dropped Mean	F-ratio	p
Sex	160	1.50	91	1.55	<1	
DDST-FM	153	10.30	85	10.11	<1	
DDST-L	146	25.88	83	25.97	<1	
DDST-GM	134	10.79	76	10.81	<1	
DDST-PS	159	10.41	89	10.41	<1	
SBI-TO	160	23.74	91	23.16	<1	
SBI-EI	160	22.94	91	22.64	<1	
SBI-HT	160	19.19	91	18.53	<1	
POCL-TO	160	22.10	91	23.30	1.07	
POCL-SOC	160	17.15	91	17.72	<1	
Food Total	159	11.71	90	11.34	<1	
Nutrition Total	159	7.96	90	7.95	<1	
Height	155	39.16	90	39.57	1.26	
Weight	156	33.82	91	34.40	<1	
SES	149	4.78	83	4.60	<1	
HES-Mom	156	10.63	90	10.09	2.26	
HES-Play	159	8.68	89	8.46	1.01	
HES-Teach	159	9.02	90	9.11	<1	
HES-Task	159	9.10	91	9.04	<1	
HES-Book	159	3.61	91	3.84	1.49	
HES-TV	155	2.29	89	2.36	<1	
MBOS-Support	151	7.53	91	7.11	2.53	
MBOS-Punish	155	5.21	89	5.14	<1	
8-Block Child	136	3.31	79	3.50	<1	
PSI	119	7.69	60	9.14	3.98	<.05
Occupation	156	4.92	90	4.77	1.67	
Mother's Ed.	153	4.86	84	4.83	<1	
Urban/Rural	152	1.56	91	1.68	6.80	<.05
Age	160	2.65	91	2.97	4.52	<.05

TABLE D-9

COMPARISON OF CONTROL GROUP FAMILIES RETAINED IN SAMPLE WITH CONTROL FAMILIES DROPPED

	Retained		Dropped			
Variable	N	Mean	N	Mean	F-ratio	p
Sex	109	1.47	53	1.45	<1	
DDST-FM	104	10.47	53	9.88	3.48	
DDST-L	101	25.68	53	24.81	1.55	
DDST-GM	89	10.89	47	10.38	2.38	
DDST-PS	109	10.61	53	10.35	1.24	
SBI-TO	109	22.66	53	22.10	<1	
SBI-EI	109	22.98	53	22.23	<1	
SBI-HT	109	18.47	53	19.76	1.46	
POCL-TO	108	22.63	52	21.79	<1	
POCL-SOC	108	16.05	52	16.82	<1	
Food Total	109	12.11	53	12.35	<1	
Nutrition Total	109	7.72	53	8.12	1.30	
Height	105	39.71	52	38.90	4.09	<.05
Weight	107	34.47	52	33.54	1.21	
SES	99	4.79	49	4.70	<1	
HES-Mom	102	10.37	50	10.56	<1	
HES-Play	109	8.29	53	8.30	<1	
HES-Teach	108	8.69	53	8.63	<1	
HES-Task	109	8.78	53	8.90	<1	
HES-Book	109	3.54	53	3.66	<1	
HES-TV	105	2.27	50	2.47	1.97	
MBOS-Support	106	7.22	48	7.20	<1	
MBOS-Punish	108	5.27	49	5.19	<1	
8-Block Child	83	3.23	40	3.13	<1	
PSI	81	8.25	42	6.63	2.67	
Occupation	103	4.80	52	4.87	<1	
Mother's Ed.	100	4.98	49	4.87	<1	
Urban/Rural	103	1.59	52	1.67	<1	
Age	108	2.84	53	2.86	<1	

TABLE D-10

COMPARISON OF HEAD START FAMILIES RETAINED IN SAMPLE WITH HEAD START FAMILIES DROPPED

	Retained		Dropped			
Variable	N	Mean	N	Mean	F-ratio	p
Sex	90	1.42	53	1.58	3.31	
DDST-FM	86	10.61	52	10.65	<1	
DDST-L	82	26.63	51	26.11	<1	
DDST-GM	81	11.03	42	10.85	<1	
DDST-PS	87	10.58	53	10.70	<1	
SBI-TO	89	23.45	53	23.08	<1	
SBI-EI	89	23.48	53	23.06	<1	
SBI-HT	89	19.45	53	19.07	<1	
POCL-TO	88	23.03	53	23.20	<1	
POCL-SOC	88	17.25	53	17.55	<1	
Food Total	89	12.24	53	12.59	<1	
Nutrition Total	89	8.44	53	8.10	<1	
Height	89	39.92	53	40.33	<1	
Weight	89	36.04	53	36.35	<1	
SES	82	5.90	47	5.58	<1	
HES-Mom	88	10.62	53	10.71	<1	
HES-Play	88	9.02	53	9.27	1.05	
HES-Teach	89	9.33	53	9.59	<1	
HES-Task	88	9.09	53	9.03	<1	
HES-Book	89	4.27	53	3.94	2.13	
HES-TV	86	2.29	53	2.29	<1	
MBOS-Support	80	7.47	50	7.42	<1	
MBOS-Punish	83	5.11	50	4.70	2.44	
8-Block Child	68	3.65	49	3.39	<1	
PSI	76	8.41	47	9.93	2.52	
Occupation	87	5.54	51	5.40	<1	
Mother's Ed.	84	5.33	49	5.30	<1	
Urban/Rural	83	1.76	46	1.83	1.05	
Age	90	2.58	53	3.11	7.25	<.05

TABLE D-11

ANALYSIS OF FAMILIES RETAINED IN SAMPLE FROM FALL 1973 TO FALL 1974 HOME START VS. CONTROL

	Home Start		Control			
Variable	N	Mean	N	Mean	F-ratio	p
Sex	160	1.50	109	1.47	<1	
DDST-FM	153	10.30	104	10.47	<1	
DDST-L	146	25.87	101	25.68	<1	
DDST-GM	134	10.79	89	10.89	<1	
DDST-PS	159	10.41	109	10.61	1.32	
SBI-TO	160	23.74	109	22.66	2.60	
SBI-EI	160	22.94	109	22.98	<1	
SBI-HT	160	19.19	109	18.47	<1	
POCL-TO	160	22.10	108	22.63	<1	
POCL-SOC	160	17.15	108	16.05	1.38	
Food Total	159	11.71	109	12.11	<1	
Nutrition Total	159	7.96	109	7.72	<1	
Height	155	39.16	105	39.71	2.80	
Weight	156	33.82	107	34.47	<1	
SES	149	4.78	99	4.79	<1	
HES-Mom	156	10.63	102	10.37	<1	
HES-Play	159	8.68	109	8.29	3.53	
HES-Teach	159	9.02	108	8.69	1.79	
HES-Task	159	9.10	109	8.78	3.25	
HES-Book	159	3.61	109	3.54	<1	
HES-TV	155	2.29	105	2.27	<1	
MBOS-Support	151	7.53	106	7.22	1.44	
MBOS-Punish	155	5.21	108	5.27	<1	
8-Block Child	136	3.31	83	3.23	<1	
PSI	119	7.68	81	8.25	<1	
Occupation	156	4.92	103	4.80	1.13	
Mother's Ed.	153	4.86	100	4.98	<1	
Urban/Rural	152	1.56	103	1.59	<1	
Age	160	2.65	109	2.82	1.54	

TABLE D-12

DEMOGRAPHIC CHARACTERISTICS--CHILDREN PREVIOUSLY TESTED

	Number of Families	FOCAL CHILDREN									SIBLINGS								Total of Focal & Sibs	Average number of Focal & Sibs per family
		Number of focal children	Age (years) 3½	4	4½	5	5½	6	Sex M	F	Total number of siblings	Age (years) 3½	4	4½	5	5½	Sex M	F		
Huntsville, Alabama																				
Home Start	30	30		0	0	14	14	2	17	13	4	0	1	2	0	0	2	2	34	1.13
Control	25	25		0	1	12	9	3	12	13	5	0	0	3	1	0	1	4	30	1.20
Head Start	20	20		3	5	4	8	0	9	11									20	1.00
Total Sample	75	75		3	6	30	31	5	38	37	9	0	1	5	1	0	3	6	84	1.12
Dardanelle, Arkansas																				
Home Start	36	36	0	3	7	6	13	7	21	15	4	0	2	2	0	0	4	0	40	1.11
Control	20	20	1	2	3	10	3	1	13	7									20	1.00
Head Start	20	20	0	7	5	4	1	2	16	4									20	1.00
Total Sample	76	76	1	12	16	20	17	10	50	26	4	0	2	2	0	0	4	0	80	1.05
Wichita, Kansas																				
Home Start	22	22	0	7	10	5	0	0	8	14	4	0	1	1	1	1	1	3	26	1.18
Control	17	17	1	2	6	7	1	0	8	9	1	0	0	0	0	0	1	0	18	1.06
Total Sample	39	39	1	9	16	12	1	0	16	23	5	0	1	1	1	1	2	3	44	1.13
Cleveland, Ohio																				
Home Start	27	27	1	10	16	0	0	0	12	15									27	1.00
Control	10	10	1	4	3	1	1	0	4	6									10	1.00
Total Sample	37	37	2	14	19	1	1	0	16	21									37	1.00
Houston, Texas																				
Home Start	19	19	0	8	7	3	1	0	11	8	1	0	0	0	0	1	0	1	20	1.05
Control	8	8	1	1	2	2	1	1	5	3	1	0	0	0	0	1	1	0	9	1.13
Head Start	27	27	0	3	11	11	2	0	13	14									27	1.00
Total Sample	54	54	1	12	20	16	4	1	29	25	2	0	0	0	0	2	1	1	56	1.04
Parkersburg, West Virginia																				
Home Start	26	26	0	5	4	4	10	3	12	14	4	0	2	1	1	0	1	3	30	1.15
Control	30	30	0	3	12	12	3	0	16	14	3	1	1	1	0	0	2	1	33	1.10
Head Start	22	22	0	3	14	5	0	0	13	9									22	1.00
Total Sample	78	78	0	11	30	21	13	3	41	37	7	1	3	2	1	0	3	4	85	1.09
[illegible]																				
Home Start	160	160	1	33	44	32	38	12	81	79	17	0	6	6	2	2	8	9	177	1.11
Control	110	110	4	12	27	44	18	5	58	52	10	1	1	4	1	1	5	5	120	1.09
Head Start	89	89	0	16	36	24	11	2	51	38									89	1.00
Total Sample	359	359	5	61	107	100	67	19	190	169	27	1	7	10	3	3	13	14	386	1.08

TABLE D-13

EMPLOYMENT PATTERNS - FAMILIES PREVIOUSLY TESTED

	N	Unemployment rate (no family members employed)	At least two family members employed	Mother Employed[1]	Mother is sole supporter[1]
ALABAMA					
Home Start	30	26.7	23.3	33.3	10.0
Control	25	8.0	20.0	28.0	12.0
Head Start	20	35.0	20.0	40.0	20.0
Total Sample	75	22.7	21.3	33.3	13.3
ARKANSAS					
Home Start	36	19.4	13.9	22.2	8.3
Control	20	15.0	20.0	25.0	5.0
Head Start	20	0.0	40.0	95.0	55.0
Total Sample	76	13.2	22.4	42.1	19.7
KANSAS					
Home Start	22	50.0	27.3	36.4	9.1
Control	17	47.1	17.7	29.4	11.8
Total Sample	39	48.7	23.1	33.4	10.3
OHIO					
Home Start	27	88.9	3.7	7.4	3.7
Control	10	90.0	0.0	0.0	0.0
Total Sample	37	89.2	2.7	5.4	2.7
TEXAS					
Home Start	19	31.6	10.5	31.6	21.0
Control	8	12.5	25.0	25.0	0.0
Head Start	27	29.6	25.9	70.3	44.4
Total Sample	54	27.8	20.4	50.0	29.6
WEST VIRGINIA					
Home Start	26	19.2	3.9	7.7	3.8
Control	30	30.0	3.3	6.7	3.3
Head Start	22	31.8	18.2	50.0	31.8
Total Sample	78	26.9	7.7	19.2	11.5
TOTAL					
Home Start	160	38.1	13.7	22.5	8.7
Control	110	29.1	13.6	19.1	6.4
Head Start	89	24.7	25.8	64.0	38.2
Total Sample	359	32.0	16.7	31.7	15.3

[1] The N for items requiring the mother's response is somewhat less than the total number of respondents since, overall, 6.7% of the interviews were completed by someone other than the mother; the total number of mothers responding was 334.

TABLE D-14

DEMOGRAPHIC CHARACTERISTICS--CHILDREN NOT PREVIOUSLY TESTED

	Number of Families	FOCAL CHILDREN Number of focal children	Age (years) 3½	4	4½	5	5½	M	F	SIBLINGS Total number of siblings	Age (years) 2½	3	3½	4	4½	5	5½	Sex M	F	[illegible]
Huntsville, Alabama																				
Home Start										2	0	1	0	1	0	0	0	[illegible]	2	[illegible]
Control	9	9	0	0	3	3	3	6	3	5	0	1	1	1	0	1	1	[illegible]	[illegible]	[illegible]
Total Sample										7	0	2	1	2	0	1	1	[illegible]	[illegible]	[illegible]
Dardanelle, Arkansas																				
Home Start										10	1	0	4	2	1	0	0	4	6	[illegible]
Control	11	11	5	3	0	3	0	5	6	4	0	3	1	0	0	0	0	2	2	[illegible]
Total Sample										14	1	3	5	2	1	0	0	6	8	[illegible]
Wichita, Kansas																				
Home Start										1	0	0	0	1	0	0	0	[illegible]	[illegible]	[illegible]
Control	17	17	3	6	5	3	0	9	8	0	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]
Head Start	34	34	0	10	17	6	1	19	15											[illegible]
Total Sample	51	51	3	16	22	9	1	28	23	1	0	0	0	1	0	0	0	[illegible]	[illegible]	[illegible]
Cleveland, Ohio																				
Home Start										2	0	2	0	0	0	0	0	[illegible]	[illegible]	[illegible]
Control	25	25	6	7	11	1	0	16	9	6	1	1	1	0	1	0	1	[illegible]	[illegible]	[illegible]
Head Start	41	41	6	17	15	2	1	19	22											[illegible]
Total Sample	66	66	12	24	26	3	1	35	31	8	1	3	1	0	1	0	1	[illegible]	[illegible]	[illegible]
Houston, Texas																				
Home Start										1	0	0	1	0	0	0	0	[illegible]	[illegible]	[illegible]
Control	17	17	6	4	4	3	0	9	8	4	0	0	3	0	1	0	0	[illegible]	[illegible]	[illegible]
Total Sample										5	0	0	4	0	1	0	0	[illegible]	[illegible]	[illegible]
Parkersburg, West Virginia																				
Home Start										4	1	1	2	0	0	0	0	[illegible]	[illegible]	[illegible]
Control	22	22	4	9	6	3	0	10	12	7	0	3	3	1	0	0	0	[illegible]	[illegible]	[illegible]
Total Sample										11	1	4	5	1	0	0	0	[illegible]	[illegible]	[illegible]
Total Group																				
Home Start										20	2	4	7	4	1	0	[illegible]	[illegible]	[illegible]	[illegible]
Control	[illegible]	101	24	29	29	16	3	55	46	26	1	8	9	2	2	1	[illegible]	[illegible]	[illegible]	[illegible]
Head Start	[illegible]	75	6	27	32	8	2	38	37											[illegible]
Total Sample	176	176	30	56	61	24	5	93	83	46	3	12	16	6	3	1	2	[illegible]	[illegible]	[illegible]

TABLE D-15

ASSIGNMENT OF FOCAL CHILDREN TO SITE COORDINATORS AND COMMUNITY INTERVIEWERS

Site	Total		Site Coordinator		Number of Focal Children							
					Interviewer 1		Interviewer 2		Interviewer 3		Interviewer 4	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
ALABAMA												
Home Start	30	36	1		7	11	8	8	5	7	9	10
Control	34	30	0		11	7	7	6	9	11	7	6
Head Start	20	24	0		1	4	4	4	9	6	6	10
Total Sample	84	90	1		19	22	19	18	23	24	22	26
ARKANSAS												
Home Start	36	39			10	5	7	8	8	7	11	9
Control	31	23			8	4	5	6	7	5	11	7
Head Start	20	27			4	5	7	6	5	4	4	4
Total Sample	87	70			22	14	19	20	20	16	26	20
KANSAS												
Home Start	22	28			8	8	6	9	8	11		
Control	34	21			11	7	10	7	13	7		
Head Start	34	—			14	—	13	—	7	—		
Total Sample	90	49			33	15	29	16	28	18		
OHIO												
Home Start	27	32			15	17	12	15				
Control	35	11			18	6	17	5				
Head Start	41	—			21	—	20	—				
Total Sample	103	43			54	23	49	20				
TEXAS												
Home Start	19	27	0	0	1	12	5	11	13	4		
Control	25	11	4	0	1	4	11	2	13	5		
Head Start	27	31	4	6	1	14	11	9	11	2		
Total Sample	71	69	4	6	3	30	27	22	37	11		
WEST VIRGINIA												
Home Start	26	30			7	8	6	6	7	8	6	8
Control	52	34			9	7	13	11	13	7	17	9
Head Start	22	30			8	10	10	7	4	12	0	1
Total Sample	100	94			24	25	29	24	24	27	23	18

TABLE D-16

PERCENT OF FAMILIES NOT TESTED ON TIMELY BASIS AND MEAN NUMBER OF WEEKS FROM SPECIFIED TIME PERIOD

Group	Percent of families not tested during specified time period	Mean # of weeks from specified testing period Visit I (PSI)	Mean # of weeks from specified testing period Visit II (DDST)
Kindergarten	35%	3.2	3.0
Control & New Home Start	42%	3.8	3.5
Home Start	9%	2.0	1.9
Head Start	62%	1.8	2.6
TOTAL SAMPLE	39%	2.7	2.9

TABLE D-17

TESTING TIMES

Measures	N	Mean (minutes)	Spring Mean	SD	Maximum
Child Measures					
PSI					
Home Start	160	12.6	(13.8)	4.13	25.0
Control	211	12.1	(13.5)	4.63	25.0
Head Start	164	12.3	(12.0)	3.77	25.0
Total Sample	535	12.3	(13.3)	4.23	25.0
DDST					
Home Start	160	18.3	(21.7)	4.97	36.0
Control	209	18.5	(20.0)	5.10	34.0
Head Start	163	17.5	(16.9)	5.23	39.0
Total Sample	532	18.1	(20.0)	5.11	39.0
HEIGHT AND WEIGHT					
Home Start	158	3.0	(3.7)	1.78	15.0
Control	207	3.1	(3.3)	3.66	50.0
Head Start	162	2.7	(2.6)	1.55	10.0
Total Sample	527	2.9	(3.3)	2.64	50.0
TOTAL CHILD TIME					
Home Start		33.9	(40.2)		
Control		33.7	(36.8)		
Head Start		32.5	(30.5)		
Total Sample		33.3	(36.6)		
Parent Questionnaires					
SBI					
Home Start	159	5.2	(6.7)	2.17	15.0
Control	211	5.5	(6.4)	2.44	18.0
Head Start	163	5.3	(5.1)	2.49	16.0
Total Sample	533	5.3	(6.2)	2.38	18.0
HES					
Home Start	160	6.6	(8.1)	2.13	15.0
Control	211	6.8	(7.5)	2.35	15.0
Head Start	164	6.7	(6.3)	2.59	20.0
Total Sample	535	6.7	(7.5)	2.36	20.0
PARENT INTERVIEW I					
Home Start	159	6.6	(14.6)	3.64	24.0
Control	208	5.6	(11.6)	4.79	55.0
Head Start	164	6.1	(14.5)	3.88	25.0
Total Sample	531	6.0	(13.7)	4.21	55.0

(Continued)

TABLE D-17

TESTING TIMES
(Continued)

Measures	N	(minutes)	Spring Mean	SD	Maximum
Parent Questionnaires (Continued)					
PARENT INTERVIEW II					
Home Start	159	11.2	----	4.32	30.0
Control	201	10.7	----	3.95	26.0
Head Start	159	11.7	----	4.21	27.0
Total Sample	519	11.2	----	4.16	30.0
FOOD INTAKE					
Home Start	159	7.3	(8.3)	3.00	17.0
Control	211	7.4	(7.7)	3.17	20.0
Head Start	151	6.0	(6.5)	4.09	43.0
Total Sample	521	7.0	(7.7)	3.47	43.0
TOTAL PARENT TIME					
Home Start		34.2	(37.7)		
Control		36.0	(32.2)		
Head Start		35.8	(32.4)		
Total Sample		36.2	(35.1)		
Parent-Child Interaction					
8-BLOCK					
Home Start	157	18.9	(21.8)	7.87	71.0
Control	209	19.9	(21.0)	6.23	35.0
Head Start	163	18.4	(19.9)	7.04	40.0
Total Sample	529	19.1	(21.1)	7.01	71.0
TOTAL BATTERY TIME					
Home Start		87.0	(99.7)		
Control		89.6	(90.0)		
Head Start		86.7	(82.8)		
Total Sample		88.6	(92.8)		

TABLE D-18

CONDITIONS OF TESTING SUMMARIZED OVER ALL MEASURES

	Group	Log 1	Logs 2 & 3	Fall Mean	Spring Mean
Percent of testing sessions where mother was present	Home Start	91.8%	97.8%	94.0%	91.3%
	Control	94.3	97.4	95.4	92.3
	Head Start	40.4	92.5	61.0	60.7
	Total Sample	77.2	95.8	84.1	84.9
Percent of testing sessions where Home Visitor or teacher was present	Home Start	41.5	37.1	39.9	52.0
	Control	57.6	31.9	48.5	48.2
	Head Start	8.1	2.8	6.0	11.6
	Total Sample	37.8	23.5	32.5	41.9
Mean number of people in the room	Home Start	5.0	4.9	5.0	5.3
	Control	5.0	4.7	4.9	5.5
	Head Start	3.5	4.3	3.8	3.6
	Total Sample	4.6	4.6	4.6	5.0
Percent of testing sessions rated noisy	Home Start	21.5	23.0	22.0	25.8
	Control	21.2	20.7	21.0	23.9
	Head Start	26.1	28.8	27.2	28.5
	Total Sample	22.8	24.1	23.3	25.8
Percent of testing sessions where tester had difficulties	Home Start	14.5	14.8	14.6	17.7
	Control	21.4	14.5	18.9	18.0
	Head Start	8.2	10.6	9.1	13.0
	Total Sample	15.3	13.3	14.5	16.8
		Log 1	Logs 2 & 3	% of Total	Spring Mean
Frequency of testing done at:					
Center	Home Start	3	0	1.2	0.3
	Control	0	0	0	0
	Head Start	126	52	66.7	80.5
	Total Sample	129	52	21.6	17.9
Home	Home Start	155	88	98.4	99.7
	Control	208	117	100.0	100.0
	Head Start	33	54	32.6	17.1
	Total Sample	396	259	78.1	81.6

(Continued)

TABLE D-18

CONDITIONS OF TESTING SUMMARIZED OVER ALL MEASURES
(Continued)

	Group	Log 1	Logs 2 & 3	% of Total	Spring Mean
Frequency of testing in each location:					
Living Room	Home Start	103	50	61.9	61.1
	Control	149	65	65.8	68.9
	Head Start	28	24	19.5	12.2
	Total Sample	280	139	50.0	52.6
Dining Room	Home Start	7	7	5.7	5.4
	Control	11	10	6.5	5.4
	Head Start	3	8	4.1	6.1
	Total Sample	21	25	5.5	5.5
Kitchen	Home Start	19	10	11.7	8.7
	Control	14	12	8.0	6.8
	Head Start	3	12	5.6	0.0
	Total Sample	36	34	8.4	6.2
Living Room plus another room	Home Start	23	20	17.4	20.6
	Control	22	25	14.4	13.5
	Head Start	3	11	5.3	3.7
	Total Sample	48	56	12.5	14.7
Other[1]	Home Start	7	1	3.2	4.2
	Control	13	4	5.2	5.4
	Head Start	124	50	65.4	79.3
	Total Sample	144	55	23.7	20.9
Frequency of testing done on:					
Large Table	Home Start	29	15	17.9	10.5
	Control	25	21	14.1	8.6
	Head Start	24	23	18.0	12.8
	Total Sample	78	59	16.4	10.4

(Continued)

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TABLE D-18

CONDITIONS OF TESTING SUMMARIZED OVER ALL MEASURES
(Continued)

	Group	Log 1	Logs 2 & 3	% of Total	Spring Mean
Frequency of testing done on: (Continued)					
Child-sized Table	Home Start	13	6	7.7	7.9
	Control	12	10	6.7	9.5
	Head Start	58	32	34.5	27.4
	Total Sample	83	48	15.7	12.7
Floor	Home Start	43	13	22.8	25.1
	Control	62	24	26.4	29.4
	Head Start	25	13	14.6	13.4
	Total Sample	130	50	21.6	23.8
Couch	Home Start	6	9	6.1	2.5
	Control	12	1	4.0	1.4
	Head Start	0	1	0.4	1.8
	Total Sample	18	11	3.5	2.0
Large Table and Chair	Home Start	24	17	16.7	13.6
	Control	29	24	16.3	11.8
	Head Start	22	15	14.2	3.7
	Total Sample	75	56	15.7	10.8
Child-sized Table and Floor	Home Start	9	10	7.7	6.8
	Control	23	15	11.7	6.8
	Head Start	14	5	7.3	3.7
	Total Sample	46	30	9.1	6.1
Couch and Floor	Home Start	19	2	8.5	10.5
	Control	23	10	10.1	7.2
	Head Start	0	4	1.5	1.2
	Total Sample	42	16	7.0	7.4

(Continued)

TABLE D-18

CONDITIONS OF TESTING SUMMARIZED OVER ALL MEASURES
(Continued)

	Group	Log 1	Logs 2 & 3	% of Total	Spring Mean
Frequency of testing done on: (Continued)					
Other[2]	Home Start	25	15	10.1	22.3
	Control	24	11	11.4	24.4
	Head Start	14	11	8.9	34.1
	Total Sample	63	37	10.2	25.6

[1] Examples of "other" include Head Start Center, dining room and kitchen, hallway.

[2] Examples of "other" include table and chair, floor and bed.

TABLE D-19

PARENTAL REACTIONS TO TESTING

	N	Liked %	Didn't Like %	What parents didn't like: Nothing Specific	Too Difficult	Too Much Time	Other*
Child Measures							
DDST							
Home Start	156	98.1	1.9		2		1
Control	205	97.6	2.4	3	2		
Head Start	116	99.1	.9		1		
Total Sample	477	98.1	1.9	3	5		
PSI							
Home Start	157	99.4	.6	1			
Control	206	99.5	.5		1		
Head Start	115	100.0	0				
Total Sample	478	99.6	.4	1	1		
HEIGHT AND WEIGHT							
Home Start	156	100.0	0				
Control	204	100.0	0				
Head Start	115	100.0	0				
Total Sample	475	100.0	0				
8-BLOCK							
Home Start	156	94.2	5.8	3	1		3
Control	205	94.6	5.4	1	3		6
Head Start	145	95.9	4.1	1	3		2
Total Sample	506	94.9	5.1	6	7		11
Parent Questionnaires							
SBI							
Home Start	157	99.4	.6	1			
Control	207	99.5	.5	1			
Head Start	158	99.4	.6		1		
Total Sample	522	99.2	.8	2	1		
FOOD INTAKE							
Home Start	158	98.7	1.3	1			1
Control	207	96.1	3.9	5			2
Head Start	158	100.0	0				
Total Sample	523	98.1	1.9	6			3
HES							
Home Start	157	99.4	.6	1			
Control	207	99.0	1.0	1			
Head Start	158	100.0	0				
Total Sample	522	99.4	.6	2			
PARENT INTERVIEW							
Home Start	158	98.7	1.3	1			1
Control	207	97.6	2.4	1			3
Head Start	160	100.0	0				
Total Sample	525	98.7	1.3	2			4

*Other includes responses such as "too personal" and "too limited".

TABLE D-21

AVERAGE NUMBER OF ERRORS PER ADMINISTRATION

Measurement	Spring '74	Fall '74	Fall Site Range	Fall N*
PSI	1.1	1.2	0.5 - 1.7	123
DDST	1.0	1.3	0.3 - 2.0	100
8-Block	0.5	0.6	0 - 1.2	89
Food Intake	0.3	0.5	0 - 0.9	92
Parent Interview I	0.1	0.1	0.06 - 0.8	93
Parent Interview II	0.2	0.5	0 - 0.9	82
Home Environment Scale	0.2	0.1	0 - 0.1	94
Schaefer Behavior Inventory	0.2	0.1	0 - 0.2	93
Height and Weight	0.05	0.06	0 - 0.6	105

*N - Total number of administrations monitored during Fall 1974

TABLE D-22

PERCENT OF ADMINISTRATION ERRORS BY CATEGORY

PSI and DDST*

Error Category	PSI N = 148	DDST N = 125
Repeats (too many or too few)	19.6	33.6
Failing to have correct materials for test	0.7	0.0
Incorrect placement of materials	10.1	11.2
Incorrect wording of the question	14.9	16.0
Skipping a question or stopping test incorrectly	2.0	4.8
Probing too much or too little	34.6	0.8
Choosing inappropriate environment for test item	N/A	3.2
Other	18.2	30.4

*N = total number of errors

TABLE D-23

PERCENT OF ADMINISTRATION ERRORS BY CATEGORY

8-Block (N* = 54)

Error Category	Percent
Incorrect wording of questions	5.6%
Incorrect placement of Blocks	5.6
Failing to ask parent for verbal response	11.1
Failing to ask parent for Block placement	1.9
Repeats (too many or too few)	14.8
Skipping 8-Block section	7.4
Failing to ask child correct questions	5.6
Other	48.0

*N = total number of errors

TABLE D-24

PERCENT ADMINISTRATION ERRORS BY CATEGORY PARENT INTERVIEWS AND HEIGHT & WEIGHT

Error Category	Food Intake	Parent Interview I	Parent Interview II	Home Environment Scale	Schaefer Behavior Inventory	Height & Weight
N*	48	13	39	10	12	6
Incorrect wording	39.6	15.4	7.7	0	16.7	0
Probing too much or too little	45.8	0	10.3	60.0	0	0
Skipping question	4.2	53.8	38.5	20.0	41.7	0
Commenting inappropriately on parent response	0	0	2.65	0	0	0
Other	10.4	30.8	41.0	20.0	41.6	100.0

*N = total number of errors

TABLE D-25

REASONS FOR MISSING DATA

	Number of Instruments Administered		Number of Instruments With Missing Data		Interviewer's Comments: Child Refusal		Interviewer's Comments: Tester Error		Interviewer's Comments: Uncontrollable Circumstances		Interviewer's Comments: Language Difficulties		Unknown Reasons	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Child Measures														
PSI														
Home Start	160	192	13	30	13	29		1			0			
Control	211	130	42	27	41	27		0			1			
Head Start	164	112	10	12	10	12		0			0			
Total Sample	535	434	65	69	64	68		1			1			
DDST														
Home Start	160	192	6	23	6	22	0	1						
Control	211	130	27	12	26	11	1	1						
Head Start	164	112	2	10	2	10	0	0						
Total Sample	535	434	35	45	34	43	1	2						
HEIGHT AND WEIGHT														
Home Start	160	192	0	0	0	0								0
Control	211	130	2	1	2	1								0
Head Start	164	111	0	1	0	0								1
Total Sample	535	433	2	2	2	1								1
POCL														
Home Start	159	191	1	14										14
Control	211	129	0	7										7
Head Start	163	112	1	1										1
Total Sample	533	432	2	22										22

(Continued)

TABLE D-25

REASONS FOR MISSING DATA
(Continued)

	Number of Instruments Administered		Number of Instruments With Missing Data		Interviewer's Comments								Unknown Reasons	
					Child Refusal		Tester Error		Uncontrollable Circumstances		Language Difficulties			
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Parent Questionnaire														
SBI														
Home Start	160	192		0										0
Control	211	129		1										1
Head Start	164	112		0										0
Total Sample	535	433		1										1
HES														
Home Start	160	192												
Control	211	130												
Head Start	164	112												
Total Sample	535	434												
PARENT INTERVIEW I														
Home Start	160	192	2	1	1		0	1	1	0				
Control	210	130	1	1	0		0	0	1	1				
Head Start	164	112	2	0	0		1	0	1	0				
Total Sample	534	434	5	2	1		1	1	3	1				
PARENT INTERVIEW II														
Home Start	159		1											
Control	211		0											
Head Start	164		0											
Total Sample	534		1											
FOOD INTAKE														
Home Start	160	192	2	0	0			0	2	0				
Control	211	130	4	0	2			1	2	0				
Head Start	164	112	7	3	2			1	5	2				
Total Sample	535	434	13	3	4			2	9	2				

(Continued)

TABLE D-25

REASONS FOR MISSING DATA
(Continued)

	Number of Instruments Administered		Number of Instruments With Missing Data		Interviewer's Comments								Unknown Reasons	
					Child Refusal		Tester Error		Uncontrollable Circumstances		Language Difficulties			
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Parent-Child Interaction														
8-BLOCK														
Home Start	160	192	12	9	11	8	1			1				0
Control	211	130	16	6	16	6	0			0				0
Head Start	164	111	3	8	3	7	0			0				1
Total Sample	535	433	31	23	30	21	1			1				1
TOTAL														
Home Start	1598	1727	37	77	31	59	1	3	3	1			1	14
Control	2109	1168	92	55	87	45	1	1	3	1			0	8
Head Start	1639	1006	25	35	17	29	1	1	6	2			0	3
Total Sample	5336	3901	154	167	135	133	3	5	12	4			1	25

APPENDIX E

ANALYSIS OF CHILD AND PARENT INSTRUMENTS

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APPENDIX E

ANALYSIS OF CHILD AND PARENT INSTRUMENTS

Interim Report IV (March, 1974) described the psychometric characteristics of each measure based on data collected in fall 1973. At that time the children in Home Start and Head Start had just entered their respective programs; the control children, of course, were not in a program. Interim Report V (October, 1974) reported the same analyses for the spring 1974 data. In the present report similar analyses have been carried out on the sample of Home Start, Control and Head Start children still available in fall 1974. In the present report extensive discussion of the instruments, the rationale for their use, etc., has been omitted; See Reports IV and V for that information.

The analyses examine the internal characteristics of each instrument. The purpose of these analyses is to reexamine the strengths and weaknesses of individual items and of scale scores created from the items. Past analyses have identified "weak" items and in most cases they were subsequently modified or eliminated. Items were considered "weak" when they failed to descriminate among age groups, yielded erratic scores over time, or were unusually difficult to interpret.

Since most instruments have had this extensive analysis at three or four time points, the purpose of the present analyses is to check whether the psychometric characteristics of the instruments remained substantially similar. Knowledge of the stability or lack of stability in fall to fall test characteristics is essential to proper interpretation of findings from the change analyses. When certain psychometric characteristics are reported by group (e.g. percent passing each item or alpha coefficient) it is for the purpose of judging the comparability of the instrument characteristics across populations. None of the findings reported in this section of the report should be used to judge program effects. The analyses have been limited to those families with both fall 1973 and fall 1974 data complete. These analyses do not take into account individual or group differences in entering levels on any of the variables.

For the fall 1974 data the following internal characteristics are reported for each instrument where appropriate:

- Distribution of responses across the scoring categories of each item; or percent of persons passing each item in each six-month age interval;
- Item-scale or item-total correlations;
- Internal consistency reliability (coefficient alpha);
- Average growth from fall to fall;
- Stability and change in individual item responses from fall to fall.

The response distributions provide an indication of the appropriateness of each item for the populations sampled. A high proportion of "refusals", for example, may indicate that testers had difficulty establishing rapport. A high proportion of "wrong" responses, on the other hand, may indicate the item is too difficult. Percent passing figures indicate whether individual items are developmental in nature, i.e., by demonstrating increased percent passing with increasing age.

The alpha coefficient is reported as the index of the internal consistency of each scale or test score (when items are dichotomous alpha is equivalent to KR-20). Alpha is an important index since it sets an upper limit to a scale's reliability (Nunnally, 1967). Internal consistency reliability is generally close to alternate form reliability.

Fall-to-fall changes are reported for all measures. For these analyses only children who were tested at both time points are included. Internal consistency and fall-fall item correlations are also reported for this sample. Measures of change or growth from fall to fall are presented, first in terms of total scores or scale scores, then in terms of individual items.

ANALYSIS OF CHILD MEASURES

Preschool Inventory (PSI)

This fall the Preschool Inventory was administered to all of the 359 children who had been tested previously. However, as in the past, only tests which had responses coded for at least 28 out of the 32 items were considered to be complete. (Testers were instructed to stop the test if the child didn't respond or responded with a refusal or "don't know" to 4 items in a row.) Thirty children, considerably fewer than in past collections, were dropped for this reason. Thus the following analyses are based on 329 children.

The PSI items are listed in Table E-1. The percent of children passing each item is presented by group in Table E-2. This fall's figures were higher than last spring's (and consequently, last fall's) on all items except 1 and 22. However, the gain was, for the most part, under ten percentage points. On only 3 items was the difference among the 3 groups greater than 20 percentage points. Items 7, 17 and 24 remained the most difficult and 1, 2 and 3 the easiest. As in the past, the percent passing by age (presented in Table E-3) generally increased with age, as would be expected.

The item-total correlations are presented by group in Table E-4. The correlations were generally higher than found in past analyses. In the total sample, where the correlations ranged from 0 to 54, only 4 items had correlations less than .20. The figures for Home Start and Head Start were very similar while the control group correlations were generally lower.

The total score on the PSI was computed by summing the number of correct responses for each child. The alpha internal consistency reliability of the resulting scale (.83) was the same as last spring and higher than the previous fall (.77). Alpha coefficient for the Home Start and Head Start groups was .86 and for the control group it was .80.

Changes in PSI scores from fall 1973 to fall 1974 are presented in Table E-5 and the change analysis by item in Tables E-6 and E-7. A significant growth was found for each sample. In the six-site sample, Home Start children showed significant gains on 27 items, the controls on 19. In the four-site analysis, Home Start gained on 26 items and Head Start on 24.

To conclude, the results obtained on the PSI were similar to past findings, although, as would be expected, the percents passing each item were generally higher than before. In addition, the differences among the three groups were comparable to those found previously.

Table E-1

PRESCHOOL INVENTORY ITEMS

1 What is your first name?
2 Show me your shoulder.
3 What is this (knee)?
4 What is this (elbow)?
5 Put the yellow car on the little box.
6 Put the blue car under the green box.
7 Put 2 cars behind the box in the middle.
8 If you were sick, who would you go to?
9 When do we eat breakfast?
10 If you wanted to find a lion where would you look?
11 What does a dentist do?
12 Which way does a phonograph record go?
13 Which way does a ferris wheel go?
14 How many hands do you have?
15 How many wheels does a bicycle have?
16 How many wheels does a car have?
17 How many toes do you have?
18 Which is slower, a car or a bicycle?
19 Point to the middle one.
20 Point to the first one.
21 Point to the last one.
22 Point to the second one.
23 Which of these 2 groups has less checkers in it?
24 Which of these 2 groups has more checkers in it?
25 Point to the one that is most like a tent.
26 Make one like this (square).
27 Make one like this (triangle).
28 Which one is the color of night?
29 Color the square.
30 Color the square purple.
31 Color the triangle.
32 Color the triangle orange.

Table E-2

PRESCHOOL INVENTORY: PERCENT PASSING BY GROUP

Item[1]	Group Home Start N=145-147	 Control N=95-96	 Head Start N=85-86
1	87.8	87.5	81.4
2	78.2	78.1	89.5
3	84.4	78.1	87.2
4	67.3	62.5	83.7
5	55.1	36.5	53.5
6	39.5	33.3	40.7
7	12.3	7.3	11.6
8	67.3	58.3	77.9
9	64.6	47.9	38.4
10	28.1	20.8	25.9
11	66.4	47.9	72.1
12	44.2	43.2	52.3
13	25.2	26.3	27.9
14	67.8	61.5	53.5
15	63.4	60.4	62.8
16	37.2	33.3	39.5
17	13.6	12.5	9.3
18	68.7	64.6	69.4
19	66.0	62.5	73.3
20	44.9	45.8	30.2
21	47.6	43.7	55.8
22	34.0	34.4	37.2
23	31.3	31.2	33.7
24	8.8	9.4	4.7
25	76.2	69.8	72.1
26	40.1	39.6	60.5
27	31.3	29.2	36.5
28	66.7	64.6	64.0
29	46.3	33.3	44.2
30	60.5	49.0	62.8
31	53.1	46.9	60.5
32	78.2	62.5	79.1

---

[1] See key to items.

Table E-3

PRESCHOOL INVENTORY: PERCENT PASSING BY AGE

Item[2]	Age[1]				
	4	4 1/2	5	5 1/2	6
	N=51-52	N=94-96	N=92-93	N=65-66	N=18
1	82.7	82.3	87.1	89.4	100.0
2	71.2	80.2	86.0	83.3	94.4
3	80.8	80.2	82.8	86.4	100.0
4	67.3	71.9	66.7	71.2	88.9
5	36.5	44.8	54.8	53.0	72.2
6	26.9	28.1	46.2	45.5	61.1
7	3.8	8.3	12.9	15.4	16.7
8	55.8	64.6	68.8	74.2	83.3
9	34.6	47.9	54.8	66.7	77.8
10	11.5	25.3	25.0	31.8	50.0
11	52.9	64.6	62.4	68.2	72.2
12	28.8	40.6	51.1	57.6	66.7
13	28.8	15.6	25.0	34.8	50.0
14	51.9	65.3	60.2	66.7	72.2
15	53.8	52.1	65.6	75.8	83.3
16	21.2	30.9	38.7	48.5	61.1
17	1.9	10.4	17.2	18.2	5.6
18	67.3	62.5	64.5	78.5	83.3
19	51.9	59.4	69.9	80.3	94.4
20	32.7	32.3	36.6	60.6	61.6
21	38.5	44.8	54.8	51.5	55.6
22	28.8	38.5	43.0	28.8	22.2
23	30.8	36.5	31.2	33.3	16.7
24	9.6	7.3	7.5	6.1	11.1
25	73.1	66.7	74.2	80.3	88.9
26	25.0	38.5	50.5	59.1	72.2
27	11.5	29.2	29.3	51.5	55.6
28	55.8	56.2	67.7	77.3	94.4
29	32.7	44.8	36.6	48.5	66.7
30	44.2	57.3	66.7	59.1	55.6
31	36.5	49.0	57.0	62.1	77.8
32	63.5	75.0	73.1	80.3	88.9

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[1] Age intervals: 4 (46-51 months); 4 1/2 (52-57 months); 5 (58-63 months); 5 1/2 (64-69 months); 6 (70-81 months); four children less than 46 months old were excluded from this analysis.

[2] See key to items.

Table E-4

PRESCHOOL INVENTORY: ITEM-TOTAL CORRELATIONS

Item[1]	Group Home Start	Control	Head Start
1	21	11	21
2	37	23	37
3	40	41	40
4	44	40	44
5	46	29	46
6	44	54	44
7	29	31	29
8	42	18	42
9	50	34	50
10	37	46	37
11	54	45	54
12	40	26	40
13	34	25	34
14	23	32	23
15	37	32	37
16	49	47	49
17	28	35	28
18	34	15	34
19	53	52	53
20	30	31	30
21	35	32	35
22	-05	14	-05
23	11	-11	11
24	04	06	04
25	22	07	22
26	49	42	49
27	48	34	48
28	45	35	45
29	48	31	48
30	33	35	33
31	50	27	50
32	40	41	40

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[1] See key to items.

Table E-5

PRESCHOOL INVENTORY
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=119)		Control (N=77)		Home Start (N=84)		Head Start (N=74)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Fall '73	9.62	5.16	10.42	4.00	10.62	5.48	9.85	4.24
Fall '74	17.42	6.02	15.27	5.60	18.90	5.74	17.35	4.90
Difference	7.80	4.70	4.86	3.67	8.29	4.87	7.50	3.81
t ratio	18.02*		11.52*		15.50*		16.80*	

*p<.05

Table E-6

PRESCHOOL INVENTORY
Percent Passing Each Item--Home Start vs. Control
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

	Home Start (N=119)				Control (N= 77)			
Item	1973	1974	Gain	Rank	1973	1974	Gain	Rank
11. What does a dentist do?	21	72	51*	1	23	52	29*	2.5
5. Put yellow car on little box.	22	62	40*	2.5	23	36	13*	19.5
9. When do we eat breakfast?	27	67	40*	2.5	26	47	21*	11
8. If you were sick, who would you go to?	34	71	37*	4	34	64	30*	1
2. Show me your shoulder.	48	83	35*	5.5	55	82	27*	4.5
19. Point to middle checker.	36	71	35*	5.5	31	60	29*	2.5
3. What is this? (knee)	52	87	34*	7.5	58	78	19*	12.5
4. What is this? (elbow)	38	72	34*	7.5	43	66	23*	8.5
32. Orange	49	83	34*	7.5	44	64	19*	12.5
14. How many hands to we have?	39	68	29*	10	45	61	16*	16.5
27. Draw a triangle.	06	34	28*	11.5	04	31	27*	4.5
29. Coloring a square.	21	49	28*	11.5	32	35	03	28.5
31. Coloring a triangle.	28	55	28*	11.5	31	49	18*	14.5
12. Which way does a phonograph record go?	21	48	27*	14.5	21	43	22*	10
26. Draw a square.	13	39	27*	14.5	18	45	27*	4.5
6. Put blue car under green box.	18	44	26*	16.5	09	35	26*	7
10. If you wanted to find a lion, where would you look?	04	30	26*	16.5	06	22	16*	16.5
15. How many wheels does a bicycle have?	41	67	26*	16.5	51	60	09	24
30. Purple	38	63	25*	19	32	51	18*	14.5
16. How many wheels does a car have?	18	42	24*	20.5	18	32	14*	18
28. What is the color of night?	46	71	24*	20.5	58	69	10	22.5
18. What is slower, a car or a bicycle?	50	70	19*	22	53	64	10	22.5
21. Point to last checker.	36	52	16*	23	23	47	23*	8.5
1. What is your first name?	76	92	15*	24	90	86	- 04	31.5
13. What way does a ferris wheel go?	12	26	14*	25	19	31	12	21
25. Point to one that is most like a tent.	64	76	13*	26	66	71	05	25.5
17. How many toes do you have?	05	16	11*	27	00	13	13	19.5
23. Which of two groups has less checkers?	22	32	10	28	26	31	05	25.5
22. Point to the second checker.	25	34	08	29	36	40	04	27
20. Point to first checker.	39	45	06	30	45	42	- 04	31.5
7. Put two cars behind box in middle.	08	13	05	31	06	09	03	28.5
24. Which of two groups has more checkers? (both same)	04	07	03	32	10	12	01	30

---

*$p \leq .05$

[1] Items are listed in order of decreasing gain in percent passing for the Home Start group. Data from all six sites are included in this analysis.

Table E-7

PRESCHOOL INVENTORY
Percent Passing Each Item--Home Start vs. Head Start
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N= 84) 1973	1974	Gain	Rank	Head Start (N= 74) 1973	1974	Gain	Rank
11. What does a dentist do?	25	77	52*	1	35	73	38*	4
9. When do we eat breakfast?	32	76	44*	2.5	23	41	18*	22.5
19. Point to middle checker.	42	82	40*	3.5	18	78	61*	1
4. What is this? (elbow)	40	77	37*	4.5	38	88	50*	3
8. If you were sick, who would you go to?	39	76	37*	4.5	51	81	30*	10.5
3. What is this? (knee)	54	89	36*	6.5	61	86	26*	17.5
5. Put yellow car on little box.	26	62	36*	6.5	28	54	26*	17.5
27. Draw a triangle.	08	44	36*	6.5	09	39	30*	10.5
28. What is the color of the night?	46	82	36*	6.5	41	68	27*	15.5
2. Show me your shoulder.	51	86	35*	10	54	91	36*	5.5
31. Coloring a triangle.	30	63	33*	11	34	61	27*	15.5
26. Draw a square.	18	50	32*	12	09	65	55*	2
12. Which way does a phonograph record go?	24	55	31*	13	22	54	32*	7.5
10. If you wanted to find a lion, where would you look?	04	32	29*	14.5	05	27	22*	19.5
16. How many wheels does a car have?	21	50	29*	14.5	14	42	28*	12.5
29. Coloring a square.	23	51	29*	14.5	24	46	22*	19.5
6. Put blue car under green box.	23	50	27*	17.5	14	45	31*	9
18. Which is slower, a car or a bicycle?	49	76	27*	17.5	47	66	19*	21
32. Orange	56	82	26*	19	49	81	32*	7.5
15. How many wheels does a bicycle have?	52	76	24*	20	36	65	28*	12.5
14. How many hands do we have?	48	70	23*	21.5	39	57	18*	22.5
21. Point to the last checker.	33	56	23*	21.5	20	57	36*	5.5
30. Purple	42	64	23*	21.5	36	65	28*	12.5
1. What is your first name?	76	94	18*	24	88	84	- 04	30.5
13. Which way does a ferris wheel go?	14	30	15*	25	14	26	12*	24
17. How many toes do you have?	06	19	13*	26	01	09	08	25.5
23. Which of two groups has less checkers?	23	35	12	27	31	34	03	29
7. Put two cars behind box in middle.	10	17	07	28.5	04	12	08	25.5
20. Point to first checker.	43	50	07	28.5	26	32	07	27
22. Point to the second checker.	27	33	06	30.5	41	36	- 04	30.5
25. Point to one that is most like a tent.	71	77	06	30.5	66	70	04	28
24. Which of two groups has more checkers? (both same)	06	07	01	32	07	03	- 04	30.5

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*p $\le$ .05

[1] Items are listed in order of decreasing gain in percent passing for the Home Start group. Only the four sites with both Home Start and Head Start programs are included in this analysis.

Denver Developmental Screening Test (DDST)

In the fall 1974 data collection, the Denver Developmental Screening Test was administered to all 359 children. Before the data were analyzed, the scores of four children were removed from the Fine Motor scale items, and the responses of nine children were removed from the Language scale items. Sixteen children's responses were removed from the Gross Motor scale items and the responses of eight children were removed from Personal-Social scale items. It was necessary to drop these responses from the data analysis because items on each of these scales were omitted or improperly scored by the testers.

The DDST items are listed by scale in Table E-8. The percent of the children passing each item are presented by age in Table E-9 and by group in Table E-10. An examination of the percent passing by age group provides a picture of the developmental nature of the DDST items. All of the items show an increased percent passing with increasing age with many items at or near the ceiling in the 6 year old category.

The high percent passing of the items on the Personal-Social scale (averaging 77.7% in fall 1973 and 82.8% in spring 1974), as discussed in Interim Report V, suggests that scale is probably not useful for differentiating program effects. In the fall 1974 data anlaysis, both the Personal-Social and the Fine Motor scales appear to have reached a ceiling level (see Table E-9). The mean percent passing for the total sample on the Personal-Social scale items in fall 1974 was 86.7%. Item 7 (Draw a boy/girl), when scored for six body parts, contributes most variability on the scale, with 21.1% of the total sample passing. Because of the ceiling effect on seven of the eight items, the Fine Motor scale may no longer be sensitive enough to register meaningful differences for the evaluation of program effects. On the other hand, while a number of items on the Language and the Gross Motor scales have reached a ceiling, both scales appear to have remained sensitive enough in the fall 1974 analysis to detect differences if they do exist.

The item-scale correlations are presented by group in Table E-11 and the alpha coefficients are presented in Table E-12. The item-scale correlations of many items were lower in comparison to previous results, perhaps due to item ceiling effects. In spite of the lower item-scale correlations, the alpha coefficients of the Fine Motor, Language, and Personal-Social scales remained adequate. The alpha coefficients of the Gross Motor scale have dropped about .10 from the spring 1974 results. This reduced internal consistency suggests one should be extremely cautious in interpreting program effects from the Gross Motor scale.

The change in DDST scale scores from fall, 1973 to fall, 1974 is shown in Table E-13. The growth was significant on all scales for each of the four samples. Gains by item for the six-site samples are presented in Table E-14. Home Start children showed significant gains on 36 of the 38 items; the controls gained on 32 items. In the four-site analysis (Table E-15) Home Start children gained significantly on 30 items and Head Start on 31; the Personal-Social scale had the lowest proportion of items showing significant gains.

In summary, the Language scale on the Denver Developmental Screening test retains strong psychometric properties but the other three scales have deficiencies that make them much less valuable as evaluation measures. Nevertheless, most items were capable of showing reliable fall-to-fall gains.

Table E-8

KEY TO
DENVER DEVELOPMENTAL SCREENING TEST

Test Booklet Item Numbers	Data Analysis Item Numbers	
Fine Motor Items		
1	1	Builds tower of 8 blocks
2	2	Imitates bridge
3	3	Picks longer line
4	4	Draws vertical line
5	5	Copies circle
6	6	Copies cross
7 (3)	-	Draws girl or boy - 3 parts
7 (6)	-	Draws girl or boy - 6 parts
-	7*	Draw a girl or boy in which 1 = failure 2 = pass on 7 (3) but not 7 (6) 3 = pass on 7 (6)
Language Items		
8	8	Uses plural
9	9	Comprehends hungry
9	10	Comprehends cold
9	11	Comprehends tired
10	12	Comprehends prepositions (on)
10	13	Comprehends prepositions (under)
10	14	Comprehends prepositions (behind)
10	15	Comprehends prepositions (in front)
11	16	Recognizes colors (red)
11	17	Recognizes colors (green)
11	18	Recognizes colors (yellow)
11	19	Recognizes colors (blue)
12	20	Opposite analogies (fire)
12	21	Opposite analogies (horse)
12	22	Opposite analogies (mother)
13	23	Composition of (door)
13	24	Composition of (spoon)
13	25	Composition of (shoe)
Gross Motor Items		
14-1	--	Balances on one foot 1 second
14-5	--	Balances on one foot 5 seconds
14-10	--	Balances on one foot 10 seconds

---

*Items 7 and 26 are continuous items employed to remove item dependencies Items 7 (3) and 7 (6) and Item 14-1, 5 and 10.

Table E-8

(continued)

est Booklet tem Numbers	Data Analysis Item Number	
14-1, 5 & 10	26*	Score for balance item in which 1 = failure 2 = pass for 1 second 3 = pass for 5 seconds 4 = pass for 10 seconds
15	27	Jumps in place
16	28	Broad jump
17	29	Hops on one foot
18	30	Heel-to-toe walk
19	31	Backward heel-to-toe
20	32	Catches bounced ball
ersonal-Social Items		
21	33	Plays interactive games
22	34	Separates from mother easily
23	35	Puts on clothing
24	36	Buttons up
25 + 26**	37	Dresses with supervision
27	38	Dresses without supervision

---

*Items 7 and 26 are continuous items employed to remove item dependencies Items 7 (3) and 7 (6) and Item 14-1 ,5 and 10.

*One summary item represents items 25 and 26.

Table E-9

DENVER DEVELOPMENTAL SCREENING TEST: PERCENT PASSING BY AGE

	Age[1,3]				
Item[2]	4 N=55-61	4½ N=103-107	5 N=96-100	5½ N=66-67	6 N=18-19
Fine Motor					
1	87.7	91.6	95.0	94.0	100.0
2	86.0	90.7	92.0	94.0	94.7
3	56.1	63.6	78.0	85.1	100.0
4	96.5	97.2	100.0	100.0	100.0
5	57.9	75.7	90.0	94.0	94.7
6	49.1	68.2	81.0	92.5	94.7
7 (3)	42.1	57.0	66.0	76.1	84.2
7 (6)	12.3	15.9	24.0	28.4	42.1
Language					
8	47.4	48.1	50.0	59.7	68.4
9 Hungry	71.9	88.5	88.8	85.1	89.5
9 Cold	59.6	77.9	87.8	92.5	94.7
9 Tired	75.4	79.8	84.7	88.1	94.7
10 On	96.5	98.1	98.0	97.0	100.0
10 Under	93.0	93.3	94.9	98.5	100.0
10 Behind	73.7	79.8	88.8	92.5	94.7
10 Front	68.4	74.0	85.7	89.6	94.7
11 Red	61.4	77.9	79.6	91.0	89.5
11 Green	61.4	67.3	76.5	83.6	89.5
11 Yellow	57.9	64.4	77.6	85.1	89.5
11 Blue	71.9	71.2	78.6	89.6	100.0
12 Fire	54.4	69.2	78.6	79.1	89.5
12 Horse	8.9	67.3	78.6	88.1	89.5
12 Mother	15.8	38.5	33.7	40.3	42.1
13 Door	35.1	36.5	51.0	56.7	84.2
13 Spoon	12.3	25.0	39.8	52.2	78.9
13 Shoe	14.0	19.2	31.6	35.8	73.7
Gross Motor					
14 (1)	90.9	98.1	99.0	98.5	100.0
14 (5)	23.6	24.0	46.9	43.9	50.0
14 (10)	9.1	8.7	19.8	16.7	38.9
15	87.3	29.2	97.9	98.5	100.0
16	76.4	85.6	88.5	75.8	72.2
17	81.8	87.5	85.4	87.9	94.4
18	16.4	31.7	44.8	59.1	55.6
19	5.5	11.5	30.2	36.4	55.6
20	34.5	41.3	52.1	66.7	55.6
Personal-Social					
21	88.5	92.2	91.8	97.0	94.7
22	91.8	89.3	91.8	92.4	94.7
23	96.7	29.3	96.9	100.0	100.0
24	72.1	77.7	84.5	86.4	84.2
25 + 26	73.8	77.7	81.4	81.8	94.7
27	70.5	77.7	82.5	83.3	78.9

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[1] Age intervals: 4 (46-51 months); 4½ (52-57 months); 5 (57-63 months); 5½ (64-69 months
6 (70-81 months)

[2] See key to items.

[3] The N varies because of missing data.

Table E-10

DENVER DEVELOPMENTAL SCREENING TEST: PERCENT PASSING BY GROUP

Item[1]	Home Start N=155-158	Control N=106-109	Head Start N=86-88
Fine Motor			
1	90.5	92.7	97.7
2	90.5	87.2	94.3
3	73.4	69.7	72.7
4	97.5	99.1	100.0
5	79.7	75.2	87.5
6	72.8	66.1	85.2
7 (3)	57.0	60.8	70.5
7 (6)	48.0	12.8	28.4
Language			
8	53.2	50.0	50.0
9 Hungry	84.0	78.3	92.0
9 Cold	77.6	81.1	88.6
9 Tired	81.4	76.4	90.9
10 On	97.4	96.2	100.0
10 Under	94.9	92.5	97.7
10 Behind	84.0	84.9	85.2
10 Front	84.0	74.5	80.7
11 Red	76.3	72.6	88.6
11 Green	77.6	61.3	77.3
11 Yellow	72.4	64.2	79.5
11 Blue	81.4	66.0	84.1
12 Fire	73.7	69.8	71.6
12 Horse	74.4	67.0	77.3
12 Mother	34.6	31.1	34.1
13 Door	48.1	50.9	38.6
13 Spoon	40.4	34.9	25.0
13 Shoe	32.1	29.2	18.2
Gross Motor			
14 (1)	96.8	98.0	97.7
14 (5)	35.5	36.0	34.1
14 (10)	17.4	15.0	10.2
15	94.2	98.0	96.6
16	80.0	84.0	84.1
17	83.2	84.0	93.2
18	43.2	40.0	31.8
19	23.9	24.0	19.3
20	46.5	46.0	55.7
Personal-Social			
21	91.7	96.3	88.4
22	92.4	91.7	87.2
23	99.4	97.2	98.8
24	79.6	79.6	82.6
25 + 26	75.8	80.6	84.9
27	79.6	79.6	75.6

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[1] See key to items.

Table E-11

DENVER DEVELOPMENTAL SCREENING TEST: ITEM-SCALE CORRELATIONS BY GROUP

Item[1]	Home Start N=155-158	Control N=100-109	Head Start N=86-88
Fine Motor			
1	36	30	06
2	37	42	30
3	38	41	17
4	32	11	0
5	53	54	48
6	55	60	50
7 (3)[2]	48	51	44
7 (6)			
Language			
8	22	28	18
9 Hungry	37	26	11
9 Cold	54	40	31
9 Tired	51	39	27
10 On	08	21	0
10 Under	29	40	10
10 Behind	19	45	42
10 Front	36	41	48
11 Red	41	47	32
11 Green	50	49	55
11 Yellow	47	53	36
11 Blue	42	60	37
12 Fire	61	47	25
12 Horse	54	47	38
12 Mother	36	37	32
13 Door	62	52	39
13 Spoon	52	54	49
13 Shoe	50	44	46
Gross Motor			
14 (1)[2]	35	50	35
14 (5)			
14 (10)			
15	22	21	17
16	- 01	01	05
17	39	26	10
18	43	44	40
19	46	55	45
20	06	23	14
Personal-Social			
21	19	01	22
22	09	03	11
23	08	26	- 09
24	35	22	38
25 + 26	30	12	46
27	39	33	47

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[1] See key to items.

[2] For this analysis, scored as one continuous item - see items 7* and 26* in Table 7.

Table E-12

DENVER DEVELOPMENTAL SCREENING TEST: ALPHA COEFFICIENTS BY GROUP

	Home Start	Control	Head Start
Fine Motor	.69	.71	.55
Language	.84	.84	.76
Gross Motor	.52	.59	.50
Personal-Social	.49	.37	.56

Table E-13

DENVER DEVELOPMENTAL SCREENING TEST
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=126-155)		Control (N=86-106)		Home Start (N=90-108)		Head Start (N=72-88)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Language								
Fall '73	26.54	4.30	26.25	3.69	27.43	4.24	26.33	3.52
Fall '74	31.04	3.77	30.15	3.83	31.71	3.45	31.05	2.85
Difference	4.50	3.26	3.89	2.80	4.28	3.17	4.72	2.93
t ratio	16.10*		13.48*		13.23*		14.15*	
Gross Motor								
Fall '73	10.87	1.62	10.90	1.45	11.08	1.69	11.04	1.68
Fall '74	12.33	1.78	12.35	1.70	12.70	1.76	12.39	1.44
Difference	1.46	1.59	1.45	1.44	1.62	1.70	1.35	1.75
t ratio	10.26*		9.33*		9.02*		6.49*	
Fine Motor								
Fall '73	10.25	2.28	10.36	1.83	10.68	2.34	10.32	1.71
Fall '74	12.82	1.88	12.60	1.79	13.13	1.77	13.33	1.45
Difference	2.57	1.76	2.25	1.59	2.45	1.73	3.01	1.55
t ratio	18.16*		14.43*		14.68*		18.14*	
Personal-Social								
Fall '73	10.45	1.31	10.64	1.25	10.57	1.26	10.61	1.33
Fall '74	11.20	1.06	11.25	.95	11.24	1.04	11.20	1.10
Difference	.75	1.33	.60	1.23	.67	1.23	.59	1.17
t ratio	7.03*		5.01*		5.56*		4.51*	

*p<.05

Table E-14

DENVER DEVELOPMENTAL SCREENING TEST
Item Means--Home Start and Control, Six Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N=155)				Control (N=106)			
Fine Motor	1973	1974	Gain	Rank	1973	1974	Gain	Rank
7. Draws girl or boy	1.30	1.80	.50*	1	1.24	1.73	.49*	1
5. Copies circle	1.33	1.79	.46*	2	1.39	1.75	.36*	4
4. Draws vertical line	1.53	1.97	.44*	3.5	1.53	1.98	.45*	2
6. Copies cross	1.28	1.72	.44*	3.5	1.25	1.65	.41*	3
3. Picks longer line	1.37	1.73	.35*	5	1.42	1.69	.26*	5
2. Builds bridge	1.66	1.90	.25*	6	1.71	1.89	.18*	6
1. Builds tower	1.77	1.91	.14*	7	1.83	1.92	.09*	7
	Home Start (N=126)				Control (N= 86)			
Gross Motor	1973	1974	Gain	Rank	1973	1974	Gain	Rank
6. Balances on one foot	2.18	2.58	.40*	1	2.33	2.53	.30*	2.5
0. Heel-to-toe walk	1.10	1.48	.38*	2	1.12	1.44	.33*	1
9. Hops on one foot	1.63	1.83	.21*	3.5	1.53	1.84	.30*	2.5
1. Backward heel-to-toe	1.05	1.25	.21*	3.5	1.02	1.24	.22*	4
2. Catches bounced ball	1.28	1.43	.15*	5	1.30	1.47	.16*	5
7. Jumps in place	1.89	1.95	.06*	6.5	1.95	1.99	.03	7
8. Broad jump	1.75	1.81	.06	6.5	1.73	1.84	.10	6
	Home Start (N=154)				Control (N=106)			
Personal-Social	1973	1974	Gain	Rank	1973	1974	Gain	Rank
6. Buttons up	1.55	1.81	.25*	1	1.59	1.79	.20*	1
7. Dresses with supervision	1.67	1.79	.12*	2	1.66	1.80	.14*	2
8. Dresses without supervision	1.65	1.76	.11*	3	1.69	1.80	.11*	3
3. Plays interactive games	1.81	1.92	.10*	4.5	1.87	1.96	.09*	4
4. Separates from mother easily	1.84	1.94	.10*	4.5	1.86	1.92	.06	5
5. Puts on clothing	1.93	1.99	.06*	6	1.97	1.97	.00	6
	Home Start (N=137)				Control (N= 95)			
Language	1973	1974	Gain	Rank	1973	1974	Gain	Rank
9. Recognizes colors (blue)	1.49	1.85	.36*	1.5	1.47	1.67	.20	9.5
1. Opposite analogies (horse)	1.40	1.76	.36*	1.5	1.33	1.68	.36*	3
6. Recognizes colors (red)	1.46	1.81	.35*	3	1.52	1.75	.23*	15
4. Composition of (spoon)	1.11	1.44	.33*	4	1.09	1.38	.28*	5
0. Opposite analogies (fire)	1.43	1.75	.32*	5	1.36	1.75	.39*	2
0. Comprehends cold	1.47	1.78	.31*	6	1.52	1.81	.29*	4
1. Comprehends tired	1.54	1.84	.30*	7	1.59	1.78	.19*	11
8. Composition of (door)	1.23	1.50	.28*	8	1.13	1.54	.41*	1
7. Recognizes colors (green)	1.53	1.80	.27*	9	1.44	1.62	.18*	12
8. Recognizes colors (yellow)	1.51	1.77	.26*	10	1.51	1.66	.16*	13
. Comprehends positions (behind)	1.60	1.85	.25*	11	1.64	1.87	.23*	7.5
9. Comprehends hungry	1.63	1.85	.23*	12	1.67	1.79	.12*	16
5. Composition of (shoe)	1.12	1.34	.22*	13	1.06	1.33	.26*	6
8. Uses plural	1.36	1.56	.20*	14.5	1.43	1.52	.08	17
6. Comprehends prepositions (in front)	1.64	1.84	.20*	14.5	1.64	1.79	.15*	14.5
2. Opposite analogies (mother)	1.20	1.37	.18*	16	1.12	1.32	.20*	9.5
0. Comprehends prepositions (under)	1.86	1.94	.08*	17	1.79	1.94	.15*	14.5
2. Comprehends prepositions (on)	1.96	1.98	.01	18	1.95	1.96	.01	18

$p \le .05$

Items within each scale listed in order of decreasing mean gain for Home Start.

Table E-15

DENVER DEVELOPMENTAL SCREENING TEST
Item Means--Home Start and Head Start, Four Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N=108)				Head Start (N= 88)			
Fine Motor	1973	1974	Gain	Rank	1973	1974	Gain	Ra
7. Draws girl or boy	1.39	1.89	.50*	1	1.14	1.98	.84*	1
6. Copies cross	1.36	1.81	.45*	2	1.26	1.85	.59*	2
4. Draws vertical line	1.56	1.98	.43*	3.5	1.72	2.00	.28*	5
5. Copies circle	1.42	1.84	.43*	3.5	1.33	1.86	.53*	3
3. Picks longer line	1.43	1.79	.36*	5	1.34	1.73	.39*	4
2. Builds bridge	1.73	1.91	.18*	6	1.70	1.94	.24*	6
1. Builds tower	1.80	1.91	.11*	7	1.83	1.97	.14*	7

	Home Start (N= 90)				Head Start (N= 72)			
Gross Motor	1973	1974	Gain	Rank	1973	1974	Gain	Ra
26. Balances on one foot	2.22	2.70	.48*	1	2.26	2.43	.17	4
30. Heel-to-toe walk	1.11	1.57	.46*	2	1.10	1.36	.26*	3
31. Backward heel-to-toe	1.07	1.33	.27*	3	1.04	1.21	.17*	4
29. Hops on one foot	1.67	1.82	.16*	4	1.58	1.96	.38*	1
32. Catches bounced ball	1.36	1.49	.13*	5	1.31	1.58	.28*	2
27. Jumps in place	1.90	1.97	.07	6.5	1.94	1.99	.04	7
28. Broad jump	1.76	1.82	.07	6.5	1.81	1.86	.06	6

	Home Start (N=106)				Head Start (N= 82)			
Personal-Social	1973	1974	Gain	Rank	1973	1974	Gain	Ra
36. Buttons up	1.58	1.81	.24*	1	1.61	1.83	.22*	1
37. Dresses with supervision	1.66	1.77	.11*	2	1.59	1.76	.17*	3
33. Plays interactive games	1.84	1.93	.09*	3	1.85	1.89	.04	4
34. Separates from mother easily	1.86	1.93	.08	4.5	1.90	1.87	-.04	6
38. Dresses without supervision	1.70	1.78	.08	4.5	1.68	1.87	.18*	2
35. Puts on clothing	1.93	2.00	.07	6	1.98	1.99	.01	5

	Home Start (N= 97)				Head Start (N= 78)			
Language	1973	1974	Gain	Rank	1973	1974	Gain	Ra
24. Composition of (spoon)	1.15	1.55	.39*	1	1.12	1.26	.14*	15
19. Recognizes colors (blue)	1.53	1.91	.38*	2	1.54	1.87	.33*	4
21. Opposite analogies (horse)	1.44	1.80	.36*	3	1.36	1.79	.44*	2
16. Recognizes colors (red)	1.52	1.86	.34*	4	1.67	1.92	.26*	11
18. Recognizes colors (yellow)	1.54	1.86	.32*	5	1.54	1.82	.28*	6
17. Recognizes colors (green)	1.56	1.85	.29*	6.5	1.54	1.81	.27*	7
20. Opposite analogies (fire)	1.48	1.77	.29*	6.5	1.23	1.73	.50*	1
10. Comprehends cold	1.58	1.85	.27*	8.5	1.50	1.90	.40*	3
23. Composition of (door)	1.30	1.57	.27*	8.5	1.13	1.38	.26*	11
8. Uses plural	1.39	1.61	.22*	10.5	1.32	1.53	.21*	14
25. Composition of (shoe)	1.18	1.39	.22*	10.5	1.08	1.19	.12*	17
9. Comprehends hungry	1.69	1.89	.20*	12.5	1.64	1.91	.27*	7
11. Comprehends tired	1.64	1.84	.20*	12.5	1.63	1.90	.27*	7
14. Comprehends prepositions (behind)	1.65	1.84	.19*	14	1.60	1.87	.27*	7
22. Opposite analogies (mother)	1.21	1.38	.18*	15	1.10	1.36	.26*	11
15. Comprehends prepositions (in front)	1.74	1.85	.10	16	1.53	1.83	.31*	5
13. Comprehends prepositions (under)	1.89	1.96	.07	17	1.83	1.97	.14*	15
12. Comprehends prepositions (on)	1.96	1.97	.01	18	1.99	2.00	.01	18

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*$p \leq .05$

[1] Items within each scale listed in order of decreasing mean gain for Home Sta

Child 8-Block Task

Tables E-16 and E-17 present the percent responses by age for placement and explanation of the short 0 block. Tables E-18 and E-19 present similar data for the tall X block. The percentage correct generally increases with age, with the exception of the short 0 placement response. There is an apparent ceiling of about 80% correct responses that is attained even by the four-year-old group. Since that age group only placed the tall X correctly 58% of the time, there may be some methodological artifact that would explain the short 0 responses, e.g., the testers may have placed the board in such a position that the correct quadrant was made more obvious to the child. This result had not been found in previous data collections.

Table E-20 shows the mean scores for explanation, placement and for the 8-Block total score by group and for the total sample. Table E-21 shows the growth in total score from fall, 1973 to fall, 1974. For both the six-site and four-site samples, the fall to fall growth was significant for all three groups.

Table E-16

8-BLOCK TASK
PERCENT OF RESPONSES BY AGE
FINAL PLACEMENT OF SHORT O

Age[1] (years)	N	Incorrect	One Dimension Matched	Correct
4	50	2.0	18.0	80.0
4 1/2	102	3.9	24.5	71.6
5	97	3.1	21.6	75.3
5 1/2	67	4.5	16.4	79.1
6	19	5.3	15.8	78.9
Total	335	3.5	20.3	76.2

Table E-17

8-BLOCK TASK
PERCENT OF RESPONSES BY AGE
EXPLANATION OF SHORT O PLACEMENT

Age[1] (years)	N	No Correct Verbalization	One Dimension Verbalized	Both Dimensions Verbalized
4	57	61.4	22.8	15.8
4 1/2	106	51.9	23.6	24.5
5	98	42.9	29.6	27.6
5 1/2	67	32.8	28.4	38.8
6	19	26.3	15.8	57.9
Total	347	46.3	25.6	28.1

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[1] Age intervals: 4 (46-51 months); 4 1/2 (52-57 months); 5 (58-63 months); 5 1/2 (64-69 months); 6 (70-81 months); five children with ages below 46 months were excluded from the total sample.

Table E-18

8-BLOCK TASK
PERCENT OF RESPONSES BY AGE
FINAL PLACEMENT OF TALL X

Age[1] (years)	N	Incorrect	One Dimension Matched	Correct
4	50	8.0	34.0	58.0
4 1/2	104	2.9	45.2	51.9
5	98	3.1	31.6	65.3
5 1/2	67	3.0	20.9	76.1
6	19	10.5	10.5	78.9
Total	338	4.7	32.9	62.4

Table E-19

8-BLOCK TASK
PERCENT OF RESPONSES BY AGE
EXPLANATION OF TALL X PLACEMENT

Age[1] (years)	N	No Correct Verbalization	One Dimension Verbalized	Both Dimensions Verbalized
4	57	63.2	24.6	12.3
4 1/2	106	50.0	28.3	21.7
5	98	42.9	31.6	25.5
5 1/2	67	31.3	25.4	43.3
6	19	21.1	21.1	57.9
Total	347	45.7	27.3	27.0

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[1] Age intervals: 4 (46-51 months); 4 1/2 (52-57 months); 5 (58-63 months); 5 1/2 (64-69 months); 6 (70-81 months); five children with ages below 46 months were excluded from the total sample.

Table E-20

8-BLOCK MEANS BY GROUP

	Home Start (N=145)		Control Group (N=99)		Head Start (N=84)		Total Sample (N=328)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Explanation (0-4)	1.71	1.61	1.36	1.52	1.82	1.57	1.63	1.58
Placement (0-4)	3.37	.85	3.17	.99	3.39	.83	3.31	.89
8-Block Total (0-8)	5.23	2.17	4.63	2.07	5.31	2.09	5.07	2.13

Table E-21

CHILD 8-BLOCK TASK
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=119)		Control (N=77)		Home Start (N=85)		Head Start (N=63)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Fall '73	3.43	1.69	3.19	1.45	3.69	1.75	3.43	1.75
Fall '74	5.39	2.17	4.74	2.07	5.82	2.17	5.38	2.09
Difference	1.96	2.13	1.55	2.04	2.13	2.27	1.95	2.29
t ratio	10.01*		6.66*		8.64*		6.77*	

*p<.05

Child Food Intake Questionnaire

Table E-22 compares the mean servings and food scores for each food group obtained in the fall 1974 analysis with those obtained the previous fall. For every food group there is a slight to moderate increase both in number of servings the children consumed and in the food scores.

When food intake is analyzed as a function of the ideal intake for each food group (Table E-23) it is seen that Home Start children come closest to matching the ideal intake in meat, other fruits and vegetables and breads and cereals. Their diets, as reported by their mothers, are furthest from the ideal intake in eggs, vitamin A vegetables and citrus fruits. The control group diets appear very similar to the Home Start children's, but both are less ideal than Head Start children's diets.

Table E-22

FOOD INTAKE QUESTIONNAIRE
Mean Number of Servings and Mean Food Scores for Each Food Group
and Mean Dietary Scores
Fall 1973 and Fall 1974

Food Group	Fall 1974 (N=348) Mean	Fall 1974 (N=348) SD	Fall 1973 (N=553) Mean	Fall 1973 (N=553) SD
Number of Servings				
Milk	1.70	1.20	1.50	1.25
Meat	2.64	1.75	2.17	1.37
Eggs	.48	.80	.59	2.24
Vitamin-A vegetables	.35	.86	.28	.80
Citrus fruits	.95	1.61	.93	1.69
Other fruits and vegetables	2.99	3.11	2.47	2.37
Bread and cereal	4.50	2.39	3.95	2.26
TOTAL NUMBER OF SERVINGS	13.61	5.53	11.90	5.20
Food Scores				
Milk	1.48	.85	1.29	.84
Meat	1.26	.33	1.22	.37
Eggs	.22	.29	.23	.29
Vitamin-A vegetables	.13	.24	.11	.22
Citrus fruits	.35	.47	.32	.46
Other fruits and vegetables	1.85	.86	1.75	.90
Bread and cereal	3.36	.96	3.11	1.11
DIETARY SCORE	8.65	1.90	8.03	2.08
Dietary Score for Combined Food Groups				
Milk	1.48	.85	1.29	.84
Meat and eggs	1.48	.43	1.44	.48
All fruits and vegetables	2.33	1.17	2.18	1.18
Breads and cereals	3.36	.96	3.11	1.11
DIETARY SCORE	8.65	1.90	8.03	2.08

Table E-23

DIETARY INTAKE BY FOOD SCORES AND PERCENTAGE OF RECOMMENDED FOOD SCORES

Food Group	Recommended Food Score	Home Start N=158			Control N=108			Head Start N=82			Total Sample N=348		
		Mean	SD	% of Recom.	Mean	SD	% of Recom.	Mean	SD	% of Recom.	Mean	SD	% of Recom.
Milk	2.5	1.4	.83	56.0	1.3	.83	50.6	1.9	.77	76.5	1.5	.85	59.2
Meat	1.4	1.3	.30	90.5	1.2	.39	87.0	1.3	.28	94.3	1.3	.33	90.3
Eggs	.60	.20	.28	33.5	.22	.29	36.3	.25	.29	41.7	.22	.29	36.3
Vitamin A Vegetables	.60	.10	.22	16.9	.10	.22	16.0	.24	.29	40.8	.13	.24	22.3
Citrus Fruits	1.00	.34	.46	33.8	.23	.41	22.7	.54	.49	53.5	.35	.47	35.0
Other Fruits and Vegetables	2.40	1.8	.93	74.6	1.7	.86	72.5	2.1	.66	87.8	1.8	.86	77.1
Breads and Cereals	4.00	3.4	.95	84.8	3.3	1.0	82.9	3.4	.89	83.8	3.4	.96	84.0
TOTAL	12.50	8.5	1.6	67.9	8.1	2.0	64.7	9.7	1.9	77.8	8.7	1.9	69.2

Height and Weight

The mean height and weight, along with the standard deviations and standard errors of the means, are presented for each of the groups in Table E-24. The sibling height and weight data are also presented.

Table E-24

HEIGHT AND WEIGHT
Descriptive Measures

	Focal Children			
	N	Mean	SD	SE
Height				
Home Start	160	42.0	2.20	.17
Control	110	41.9	2.18	.21
Head Start	89	42.4	2.27	.24
Weight				
Home Start	160	38.3	5.68	.45
Control	110	38.2	6.31	.60
Head Start	89	40.4	6.50	.69

	Siblings			
	N	Mean	S.D.	S.E.
Height				
Home Start	17	39.9	2.44	.59
Control	10	40.3	2.56	.81
Weight				
Home Start	17	34.4	5.81	1.41
Control	10	35.2	4.18	1.32

SCHAEFER BEHAVIOR INVENTORY

During the analysis of the fall 1974 data an inconsistency in the scoring procedures for item ten was detected. This item is the only item on the Task Orientation scale which is reversed in the test booklet, that is the favorable response is on the left side rather than the right. Many of the testers seemed to mark the booklet in the same manner as the other items, favorable on the right. The error was detected while trying to determine the cause of a particularly low item-scale correlation for one of the groups. It turned out that one of the testers who scored the item wrong had nearly all of her children in the same group and the scoring reversal resulted in an item-scale correlation near zero. Calculation of item-scale correlations by tester showed that some testers at every site were scoring the item backwards.

An investigation of previously collected data showed that this was not a new problem but since in the past testers were more evenly distributed across groups the results of the incorrect scoring were not evident.

The item was dropped from the scale and new scale scores were calculated using the data from the previous testing periods, fall 1973 and spring 1974. The analyses of covariance reported in Interim Report V were recalculated using the new scale scores. The finding reported there held up for the comparison between Home Start and the control group, Home Start significantly higher than control. The comparison between Home Start and Head Start which was not significant with the old scale became significant in favor of Home Start.

In the fall of 1974 data collection, the Schaefer Behavior Inventory (SBI) was completed by the parents of all 359 children in the Home Start evaluation. However, before the responses were analyzed, the scores of two children were removed from the Task Orientation scale items, and one child's scores were removed from the items on the Extraversion-Introversion and Hostility-Tolerance scales because some items on these scales were omitted by the testers.

The SBI items are listed according to scale in Table E-25. The item response distributions are presented by group in Table E-26. There were no significant group differences in the item distributions. As in the past, there was a tendency by parents to use socially desirable ratings in describing their children's behavior (Note that a low score on the Hostility-Tolerance indicates tolerance).

Item-scale correlations are presented by group in Table E-27. The correlations on the revised four-item Task Orientation scale range from .62 to .79 which is somewhat higher than with the five item scale.

The item-scale correlations ranged from .33 to .65 on the Extraversion-Introversion scale and from .28 to .67 on the Hostility-Tolerance scale. The results obtained on these two scales are similar to those obtained in previous Home Start reports. There were no significant group differences on either scale.

The alpha coefficients are presented by group in Table E-27. The internal consistency of all three SBI scales ranged from .66 to .75 which is somewhat higher than the results obtained on the total sample in past analyses.

Table E-25

KEY TO

SCHAEFER BEHAVIOR INVENTORY ITEMS

TASK ORIENTATION SUBTEST

1. Pays attention to what he's (she's) doing when other things are going on around him (her).

4. Stays with a job until he (she) finishes it.

7. Becomes very involved in what he (she) is doing.

10. Goes from one thing to another; quickly loses interest in things.

13. Watches carefully when an adult is showing how to do something.

EXTRAVERSION-INTROVERSION SUBTEST

2. Tries to be with another person or group of people.

5. Likes to take part in activities with others.

8. Enjoys being with others.

11. Watches others, but doesn't join in with them.

14. Does not wait for others to approach him (her), but makes the first friendly move.

HOSTILITY-TOLERANCE SUBTEST

3. Gets impatient or unpleasant if he (she) can't get what he (she) wants when he (she) wants it.

6. Slow to forgive when offended.

9. Stays angry for a long time after an argument.

12. Complains or whines if he (she) can't get his (her) own way.

15. Gets angry when he (she) has to wait his (her) turn or share with others.

Table E-26

SCHAEFER BEHAVIOR INVENTORY

Percent Responses in Each Scoring Category by Group

	N	1	2	3	4	5	6	7
Home Start								
1	160	2	4	18	26	13	31	7
2	160	0	1	8	9	10	39	32
3	158	2	12	27	17	18	11	14
4	160	3	4	13	29	14	30	8
5	160	1	1	3	8	13	29	46
6	158	16	28	17	13	6	16	4
7	160	2	2	8	19	15	36	19
8	160	0	1	1	4	8	28	58
9	158	29	32	16	8	8	5	3
12	158	4	14	25	19	13	13	13
13	160	1	4	11	21	13	33	17
14	160	6	6	18	13	11	29	17
15	158	9	19	27	14	10	13	8
Control								
1	110	1	6	12	36	9	33	3
2	110	0	2	3	10	16	41	29
3	110	3	7	22	22	14	17	16
4	110	5	5	20	31	15	20	6
5	110	0	1	1	9	8	41	40
6	110	12	26	16	21	2	16	8
7	110	4	4	11	25	14	27	16
8	110	0	0	0	6	6	34	55
9	110	22	32	18	15	6	5	4
12	110	2	7	26	15	19	14	17
13	110	1	4	11	31	9	33	12
14	110	4	8	7	18	16	25	22
15	110	7	15	23	19	13	16	8
Head Start								
1	87	2	3	12	36	11	29	6
2	88	0	1	6	9	8	40	36
3	87	1	7	30	15	12	16	19
4	87	2	9	7	33	18	23	9
5	88	0	0	3	6	10	34	47
6	87	16	25	14	23	6	12	6
7	87	3	1	5	20	17	37	16
8	88	0	0	3	7	3	29	56
9	87	17	32	21	12	6	10	2
12	87	5	7	32	18	10	18	9
13	87	0	3	9	24	15	33	16
14	88	0	7	21	14	11	32	16
15	87	8	15	33	15	12	9	9

Table E-27

SCHAEFER BEHAVIOR INVENTORY

Item Scale Correlations And Alpha Coefficients By Group

	Home Start	Control	Head Start
Task Orientation	(N=160)	(N=110)	(N=87)
1	71	62	63
4	78	69	78
7	78	79	78
13	72	74	61
Alphas	.72	.68	.65
Extraversion-Intraversion	(N=160)	(N=110)	(N=88)
2	56	54	49
5	63	48	52
8	65	55	73
14	41	33	40
Alphas	.74	.68	.75
Hostility-Tolerance	(N=158)	(N=110)	(N=87)
3	64	57	44
6	28	39	39
9	43	41	41
12	59	66	46
15	67	56	57
Alphas	.74	.75	.69

Table E-28

SCHAEFER BEHAVIOR INVENTORY
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=157-159)		Control (N=109)		Home Start (N=109-111)		Head Start (N=85-86)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Task Orientation								
Fall '73	19.40	4.09	19.13	4.22	19.76	3.93	19.06	4.06
Fall '74	19.70	4.26	18.59	4.15	20.47	4.04	19.64	3.97
Difference	.30	4.33	-.54	4.64	.71	4.28	.58	3.96
t ratio	.88		-1.21		1.75		1.33	
Extraversion-Introversion								
Fall '73	22.96	3.93	23.07	4.36	23.07	3.77	23.47	3.42
Fall '74	22.84	4.01	23.18	3.46	22.72	4.05	23.30	3.66
Difference	-.12	4.04	.11	4.22	.35	3.96	-.16	4.37
t ratio	-.37		.27		.93		-.34	
Hostility-Tolerance								
Fall '73	19.10	5.87	18.24	6.15	19.27	6.08	19.27	5.64
Fall '74	17.95	6.03	19.28	6.00	18.04	6.44	18.59	5.74
Difference	-1.15	5.38	1.05	5.33	-1.23	5.09	-.68	4.94
t ratio	-2.68*		2.04*		-2.51*		-1.27	

*p<.05

Table E-29

SCHAEFER BEHAVIOR INVENTORY
Item Means--Home Start and Control, Six Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N=157)				Control (N=109)			
Task Orientation	1973	1974	Gain	Rank	1973	1974	Gain	Rank
4. Stays with a job until he finished it.	4.31	4.69	.37*	1	4.12	4.28	.17	1
1. Pays attention to what he's doing when other things are going on.	4.51	4.66	.15	2	4.60	4.57	-.03	2
13. Watches carefully when an adult is showing how to do something.	5.16	5.08	-.08	3	5.06	4.87	-.19	3
7. Becomes very involved in what he is doing.	5.42	5.28	-.14	4	5.35	4.86	-.49*	4

	Home Start (N=158)				Control (N=109)			
Extraversion-Introversion	1973	1974	Gain	Rank	1973	1974	Gain	Rank
5. Likes to take part in activities with others.	5.97	6.03	.06	1	6.08	6.06	-.02	2.5
8. Enjoys being with others.	6.36	6.34	-.03	2	6.42	6.37	-.06	4
14. Does not wait for others to approach him, but makes the first move.	4.79	4.73	-.06	3	4.99	4.97	-.02	2.5
2. Tries to be with another person or group of people.	5.84	5.75	-.09	4	5.58	5.78	.20	1

	Home Start (N=157)				Control (N=109)			
Hostility-Tolerance	1973	1974	Gain	Rank	1973	1974	Gain	Rank
9. Stays angry for a long time after argument.	2.36	2.58	.22	1	2.37	2.78	.41*	2
6. Slow to forgive when offended.	3.39	3.32	-.06	2	3.06	3.54	.49*	1
15. Gets angry when he has to wait his turn to share with others.	3.75	3.67	-.08	3	3.81	3.94	.14	4
12. Complains or whines if he can't get his own way.	4.66	4.13	-.52*	4	4.38	4.53	.16	3
3. Gets impatient or unpleasant if can't get what he wants.	4.96	4.24	-.71*	5	4.63	4.49	-.15	5

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*$p \leq .05$

[1] Items within each scale listed in order of decreasing mean gain for Home Start.

Table E-30

SCHAEFER BEHAVIOR INVENTORY
Item Means--Home Start and Head Start, Four Sites Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N=109)				Head Start (N=85)			
Task Orientation	1973	1974	Gain	Rank	1973	1974	Gain	Rank
4. Stays with a job until he finishes it.	4.45	4.90	.45*	1	4.01	4.62	.61*	1
1. Pays attention to what he's doing when other things are going on.	4.50	4.82	.32	2	4.59	4.59	.00	3
7. Becomes very involved in what he is doing.	5.50	5.48	-.02	3	5.35	5.25	-.11	4
13. Watches carefully when an adult is showing how to do something.	5.32	5.27	-.05	4	5.11	5.18	.07	2

	Home Start (N=110)				Head Start (N=86)			
Extraversion-Introversion	1973	1974	Gain	Rank	1973	1974	Gain	Rank
5. Likes to take part in activities with others.	5.94	6.05	.11	1	6.21	6.16	-.05	2
14. Does not wait for others to approach him, but make the first move.	4.80	4.71	-.09	2	4.73	4.93	.20	1
8. Enjoys being with others.	6.47	6.30	-.17	3	6.56	6.31	-.24	4
2. Tries to be with another person or group of people.	5.86	5.66	-.20	4	5.97	5.90	-.07	3

	Home Start (N=109)				Head Start (N=85)			
Hostility-Tolerance	1973	1974	Gain	Rank	1973	1974	Gain	Rank
9. Stays angry for a long time after argument.	2.47	2.69	.17	1	2.47	2.89	.42*	1
6. Slow to forgive when offended	3.48	3.47	-.01	2	3.16	3.35	.19	2
15. Gets angry when he has to wait his turn to share with others.	3.78	3.58	-.20	3	3.86	3.69	-.16	3
12. Complains or whines if he can't get his own way.	4.53	4.10	-.43*	4	4.72	4.15	-.56*	4.5
3. Gets impatient or unpleasant if he can't get what he wants when he wants it.	5.01	4.25	-.76*	5	5.06	4.49	-.56*	4.5

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*$p \leq .05$

[1] Items within each scale listed in order of decreasing mean gain for Home Start.

Pupil Observation Checklist (POCL)

In fall 1974, the POCL was completed on 357 children. Two children in the overall analysis were not rated on the POCL. In addition, five children were dropped from the analysis of the Test Orientation scale and one from the Sociability scale because items were omitted by the testers.

The POCL items are listed according to scale in Table E-31. The item response distributions are presented by group in Table E-32. There were no significant group differences in the item distributions. As in the past testers tended to use the positive ends of the bipolar adjectives with a disproportionately high frequency.

The item-scale correlations are presented by group in Table E-33. Item scale correlations ranged from .76 to .85 on the Test Orientation scale and .69 to .89 on the Sociability scale. There were no apparent group differences. The magnitude and direction of the item-scale correlations replicate findings obtained in previous Home Start reports.

The alpha coefficients for each scale are presented by group in Table E-34. As in the past, both POCL scales exhibit a very high degree of internal consistency. There were no significant differences when the alphas were calculated for each group separately.

Fall-to-fall growth in POCL scale scores is presented in Table E-35 for the four- and six-site samples. In the six-site analysis significant growth occurred for the Home Start group on both scales. In the four-site analysis the Head Start group showed significant growth on both scales but Home Start gained reliably on only the Test Orientation scale. Individual item gains are presented in Tables E-36 and E-37. In the six-site analysis it was found that Home Start children gained significantly on all the Test Orientation items and on half of the Sociability items; control children showed no significant gains. In the four-site analysis Home Start children gained on four of the five Test Orientation items whereas Head Start gained on all five. Head Start children showed significant gain on all Sociability items whereas Home Start did not gain significantly on any of the Sociability items.

In summary, the results obtained on the Pupil Observation Checklist Test Orientation and Sociability scales are very similar to the findings obtained in earlier Home Start evaluations. It is also evident that group differences on the psychometric properties of each scale are minimal.

Table E-31

Key To Pupil Observation Checklist

Item										Scale
1	RESISTIVE	( )	( )	( )	( )	( )	( )	( )	COOPERATIVE	TO
2	SHY	( )	( )	( )	( )	( )	( )	( )	SOCIABLE	S
3	WITHDRAWN	( )	( )	( )	( )	( )	( )	( )	OUTGOING	S
4	INDIFFERENT	( )	( )	( )	( )	( )	( )	( )	INVOLVED	TO
5	DEFENSIVE	( )	( )	( )	( )	( )	( )	( )	AGREEABLE	TO
6	PASSIVE	( )	( )	( )	( )	( )	( )	( )	ACTIVE	S
7	GIVES UP	( )	( )	( )	( )	( )	( )	( )	KEEPS TRYING	TO
8	QUIET	( )	( )	( )	( )	( )	( )	( )	TALKATIVE	S
9	INATTENTIVE	( )	( )	( )	( )	( )	( )	( )	ATTENTIVE	TO
10[1]	CALM	( )	( )	( )	( )	( )	( )	( )	EXCITED	--

TO = Test Orientation

S = Sociability

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[1] Item 10 was completed by the testers, but was not analyzed for this report.

Table E-32

HIGH/SCOPE PUPIL OBSERVATION CHECKLIST
Home Start Percent Responses in Each Scoring Category by Group

		Rating						
Item	N	1	2	3	4	5	6	7
Cooperative	156	3	6	7	6	16	35	26
Sociable	159	4	16	11	11	22	21	15
Outgoing	159	2	8	14	21	18	22	16
Involved	156	2	6	8	13	21	31	18
Agreeable	156	1	5	7	14	22	34	16
Active	159	1	6	11	9	26	26	21
Keeps Trying	156	2	9	10	16	14	36	12
Talkative	159	10	18	15	15	18	13	11
Attentive	156	2	6	9	11	18	43	10
CONTROL								
Cooperative	108	7	7	10	11	15	31	19
Sociable	109	13	14	14	11	13	22	15
Outgoing	109	9	13	16	12	14	23	15
Involved	108	5	7	10	18	19	26	15
Agreeable	108	5	5	6	21	22	26	16
Active	109	8	7	11	19	18	17	18
Keeps Trying	108	10	9	14	16	17	23	11
Talkative	109	18	20	15	11	11	10	15
Attentive	108	4	11	7	26	17	19	15
HEAD START								
Cooperative	88	1	2	5	7	18	33	34
Sociable	88	5	7	19	5	9	32	24
Outgoing	88	2	5	10	14	21	24	24
Involved	88	0	0	2	17	24	37	19
Agreeable	88	1	2	3	12	17	38	25
Active	88	0	1	1	16	21	29	30
Keeps Trying	88	2	3	5	12	26	36	15
Talkative	88	5	15	17	11	16	18	18
Attentive	88	1	1	7	16	24	37	14

Table E-33

HIGH/SCOPE PUPIL OBSERVATION CHECKLIST
Item-Scale Correlations
by Group

	Home Start	Control	Head Start
Test Orientation	(N=156)	(N=108)	(N= 88)
Cooperative	84	87	83
Involved	88	87	76
Agreeable	83	85	86
Keeps Trying	83	78	77
Attentive	76	84	76
Sociability	(N=159)	(N=109)	(N= 88)
Sociable	76	89	81
Outgoing	80	88	75
Active	65	73	68
Talkative	68	82	69

Table E-34

HIGH/SCOPE PUPIL OBSERVATION CHECKLIST
Alpha Coefficients
by Group

	Home Start	Control	Head Start
Test Orientation	.94	.94	.92
Sociability	.87	.93	.87

Table E-35

PUPIL OBSERVATION CHECKLIST
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=155-158)		Control (N=106-107)		Home Start (N=106-1[illegible]9)		Head Start (N=86)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Test Orientation								
Fall '73	22.52	8.52	22.61	8.08	23.51	8.69	23.14	7.44
Fall '74	25.76	6.77	23.43	7.74	25.68	7.03	27.24	5.49
Difference	3.25	7.89	.82	8.70	2.17	7.58	4.10	7.31
t ratio	5.10*		.97		2.93*		5.18*	
Sociability								
Fall '73	17.01	7.06	16.50	6.76	17.36	7.42	17.28	6.63
Fall '74	18.35	5.76	16.89	7.17	18.36	5.90	20.20	5.57
Difference	1.34	6.91	.39	6.68	1.00	7.14	2.92	6.49
t ratio	2.43*		.59		1.46		4.15*	

*p<.05

Table E-36

PUPIL OBSERVATION CHECKLIST
Item Means--Home Start and Control, Six Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start (N=155) 1973	1974	Gain	Rank	Control (N=107) 1973	1974	Gain	Rank
Test Orientation								
1. Cooperative	4.54	5.41	.86*	1	4.50	4.87	.36	1
7. Keeps Trying	4.15	4.88	.74*	2	4.21	4.36	.14	3
4. Involved	4.53	5.15	.62*	3	4.61	4.74	.13	4
9. Attentive	4.52	5.10	.58*	4	4.56	4.56	.00	5
5. Agreeable	4.77	5.22	.45*	5	4.72	4.91	.19	2

Item	Home Start (N=158) 1973	1974	Gain	Rank	Control (N=106) 1973	1974	Gain	Rank
Sociability								
3. Outgoing	4.28	4.73	.46*	1	3.99	4.38	.39	1
2. Sociable	4.13	4.54	.41*	2	3.89	4.24	.35	2
6. Active	4.87	5.14	.27	3	4.90	4.56	-.34	4
8. Talkative	3.73	3.94	.22	4	3.73	3.72	-.01	3

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*p ≤ .05

[1] Items within each scale listed in order of decreasing mean gain for Home Start.

Table E-37

PUPIL OBSERVATION CHECKLIST
Item Means--Home Start and Head Start, Four Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

	Home Start (N=106)				Head Start (N= 86)			
Item	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Test Orientation								
1. Cooperative	4.75	5.40	.65*	1	4.79	5.71	.92*	2
7. Keeps Trying	4.35	4.85	.50*	2	4.29	5.22	.93*	1
4. Involved	4.69	5.13	.44*	3	4.63	5.52	.90*	3
9. Attentive	4.74	5.15	.42*	4	4.44	5.23	.79*	4
5. Agreeable	4.99	5.15	.16	5	4.99	5.56	.57*	5

	Home Start (N=109)				Head Start (N= 86)			
	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Sociability								
8. Talkative	3.70	4.06	.36	1	3.80	4.48	.67*	4
3. Outgoing	4.42	4.74	.32	2	4.40	5.12	.72*	3
2. Sociable	4.21	4.39	.18	3	4.20	4.93	.73*	2
6. Active	5.03	5.17	.14	4	4.88	5.67	.79*	1

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*p $\leq$ .05

[1] Items within each scale listed in order of decreasing mean gain for Home Start.

ANALYSIS OF PARENT MEASURES

High/Scope Home Environment Scale (HES)

This fall the Home Environment Scale was administered to all of the 359 parents who had been previously interviewed. The percent of responses in each scoring category are presented for the entire sample and each group in Table E-38. The response distributions compared closely to those obtained last spring. In comparing groups, it can be seen that Home Start and Head Start figures were quite similar while the control group almost always had a greater percentage of responses in the lower scoring categories.

The items included in each scale (only 26 of the 37 items are used for the scale scores) are presented in Table E-39. The item-scale correlations are presented by group in Table E-40. The correlations ranged from .42 to .83 which is considerably higher than the ranges from previous data collections, but there were no apparent differences among the three groups.

The alpha coefficients for each scale are presented by group in Table E-41. The internal consistency reliabilities of the three groups were similar on scales I, III and IV, but the Head Start figures were lower than the others on scales II and V. These results are comparable to those from last spring.

The average growth from fall 1973 to fall 1974 is presented in Table E-42 for each group in the four- and six-site samples. In the six-site analysis Home Start children displayed significant growth on all five scales and controls gained significantly on all but the Mother Involved scale. In the four-site analysis Home Start children gained on all but the Mother Involved scale; Head Start children gained significantly on the Playthings scale but showed a significant decrease in the Mother Involvement score. When the individual items were examined, the six-site analysis (Table E-43) found Home Start children gaining significantly on 14 of the total 25 items, losing significantly on one item. Control children showed significant gain on eight items. In the four-site analysis (Table E-44) Home Start gained on 13 items and showed a loss on one. Head Start gained on only four items and lost on one.

In general the psychometric analyses of the Home Environment Scale did not indicate major differences from the results obtained in the previous data collections.

Child's Name ______________ ______________ Time Started ______________
First Last

Focal Parent's Name ______________ Time Finished ______________

Community/City ______________ State ______________ Date ______________

Tester ______________

Comments (Child became ill, refused, etc.) ______________

HIGH/SCOPE HOME ENVIRONMENT SCALE

This booklet was prepared by High/Scope Educational Research Foundation, Ypsilariti, Michigan for use under Office of Child Development, HEW, Contract No. HEW-OS-72-127.

April, 1974

Table E-38

HIGH/SCOPE HOME ENVIRONMENT SCALE

I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE ACTIVITIES THAT ______________ (Child's Name) DOES FROM DAY TO DAY. SOME OF THE QUESTIONS ARE ABOUT THINGS HE (SHE) PLAYS WITH, AND SOME ARE ABOUT THINGS THAT YOU DO TOGETHER. THE QUESTIONS WILL HELP US TO UNDERSTAND MORE ABOUT WHAT CONDITIONS ARE BEST FOR A YOUNG CHILD AS HE (SHE) GROWS.

1. HOW MANY CHILDREN'S BOOKS ARE IN YOUR HOME THAT ______________ (Child's Name) CAN LOOK AT?

			Hm	C	Hd
Would you say:	42.3	fifteen or more	43.1	33.6	51.7
or:	35.7	several, but not fifteen	34.4	36.4	37.1
or:	22.0	three or fewer	22.5	30.0	11.2

2. HOW OFTEN WOULD YOU SAY SOMEONE READS STORIES TO ______________ (Child's Name)?

			Hm	C	Hd
Would you say:	32.6	almost every day	32.5	31.8	33.7
or:	34.0	several times a week	33.1	30.9	39.3
or:	33.4	not that often?	34.4	37.3	27.0

3. HOW OFTEN DO YOU AND ______________ (Child's Name) TALK ABOUT THE PICTURES HE (SHE) MAKES, WHAT HE (SHE) DOES DURING THE DAY, HIS (HER) FRIENDS, AND SO ON?

			Hm	C	Hd
Would you say:	24.8	for about a half-hour or more every day	25.6	22.7	25.8
or:	51.0	for a few minutes every day	45.6	49.1	62.9
or:	24.2	several times a week or less?	28.8	28.2	11.2

4. HOW OFTEN DO YOU LET ______________ (Child's Name) HELP YOU WHILE YOU ARE COOKING, CLEANING THE HOUSE, WASHING DISHES, OR DOING OTHER HOUSEHOLD TASKS?

			Hm	C	Hd
Would you say:	52.4	almost every day	53.1	58.2	43.8
or:	25.3	several times a week	26.3	17.3	33.7
or:	22.3	not that often?	20.6	24.5	22.5

(continued)

Table E-38
(continued)

5. I'M GOING TO READ A LIST OF HOUSEHOLD TASKS THAT CHILDREN SOMETIMES HELP WITH. PLEASE TELL ME WHICH OF THEM ____________ (Child's Name) HAS HELPED YOU WITH IN THE LAST MONTH.

Yes	No			Hm	C	Hd
37.2	62.8	clean or peel food for a meal	Yes - No -	42.5 57.5	31.2 68.8	34.8 65.2
29.0	71.0	mix or bake things, like cookies		28.8 71.3	29.1 70.9	29.2 70.8
30.4	69.6	stir things while they cook, like soup, pudding, or jello		33.8 66.3	26.4 73.6	29.2 70.8
80.8	19.2	find food on shelves at the grocery store for you		83.8 16.3	75.5 24.5	82.0 18.0
79.9	20.1	take off the dishes after meals		81.3 18.8	79.1 20.9	78.7 21.3
80.3	19.7	put clean clothes into the right drawers or shelves		81.6 18.4	81.7 18.3	76.1 23.9

6. HOW OFTEN DO YOU JOIN IN THE PLAY ACTIVITIES THAT ____________ (Child's Name) IS INVOLVED IN, SUCH AS PLAYING GAMES, DRAWING PICTURES, OR SINGING?

			Hm	C	Hd
Would you say:	42.3	almost every day	47.5	42.7	32.6
or:	31.2	once a week or so	26.9	28.2	42.7
or:	26.5	not that often?	25.6	29.1	24.7

7. HOW MUCH TIME DOES ____________ (Child's Name) WATCH TELEVISION?

			Hm	C	Hd
Would you say:	48.0	about 2 hours a day or more	49.7	46.4	47.2
or:	34.4	every day but not for two hours	35.2	30.0	38.2
or:	17.6	several times a week or less?	15.1	23.6	14.6

8. HOW OFTEN DO YOU TALK WITH ____________ (Child's Name) ABOUT HIS (HER) FEELINGS TOWARDS THINGS, SUCH AS HIS (HER) FEARS, PEOPLE OR THINGS HE (SHE) ESPECIALLY LIKES, OR PEOPLE OR THINGS HE (SHE) ESPECIALLY DOESN'T LIKE?

			Hm	C	Hd
Would you say:	44.3	almost every day	42.5	44.5	47.2
or:	34.3	several times a week	38.1	29.1	33.7
or:	21.4	not that often?	19.4	26.4	19.1

Table E-38
(continued)

9. I AM GOING TO READ TO YOU A LIST OF THINGS CHILDREN CAN PLAY WITH. PLEASE TELL ME WHICH ONES ______________ HAS A CHANCE TO PLAY WITH AT HOME.
(Child's Name)

	Yes	No	
a.	93.9	6.1	crayons and paper
b.	76.0	24.0	scissors
c.	65.7	34.3	scotch tape, paste, or stapler
d.	51.5	48.5	jigsaw puzzles
e.	84.9	15.1	old picture catalogs to read,and cut up, like Sears, Wards, or others
f.	48.2	51.8	paint or magic markers
g.	37.6	62.4	clay or playdough
h.	52.2	47.8	"put-together" toys like tinkertoys, Legos, pegboards, or beads for stringing
i.	51.0	49.0	hammer and nails with some wood scraps
j.	45.3	54.7	yarn, thread, and cloth scraps for knitting or sewing
k.	65.7	34.3	make believe toys out of milk cartons, tin cans, or egg cartons
l.	33.5	66.5	plants of his (her) own in a pot or garden

10. HOW OFTEN DO YOU PLAY "HOUSE", "STORE", "DOCTOR", OR OTHER MAKE-BELIEVE GAMES WITH ______________ ?
(Child's Name)

			Hm	C	Hd
Would you say:	9.0	almost every day	8.1	11.0	8.0
or:	19.9	several times a week	18.8	19.3	22.7
or:	71.1	not that often?	73.1	69.7	69.3

11. NOW I'M GOING TO READ A LIST OF THINGS CHILDREN START TO LEARN AS THEY GROW TO BE SCHOOL AGE. PLEASE TELL ME WHICH OF THEM YOU HAVE TRIED TO TEACH ______________ IN THE PAST MONTH.
(Child's Name)

	Yes	No	
a.	83.6	16.4	nursery rhymes, prayers, or songs
b.	81.3	18.7	colors
c.	60.1	39.9	shapes, such as circles, squares, or triangles
d.	68.8	31.2	to write his (her) name
e.	57.1	42.9	to remember his (her) address and telephone number
f.	95.8	4.2	to count things
g.	66.0	34.0	to recognize numbers in books
h.	80.8	19.2	to say the "abc's"
i.	55.4	44.6	to recognize letters in books
j.	43.2	56.8	to read words on signs or in books
k.	73.0	27.0	ideas like "big-little", "up-down", "before-after", and so on

Table E-38
(continued)

9. Playthings

		Hm	C	Hd
a.	Yes -	94.4	89.1	98.9
	No -	5.6	10.9	1.1
b.	Yes -	86.3	69.1	66.3
	No -	13.8	30.9	33.7
c.	Yes -	75.0	52.7	65.2
	No -	25.0	47.3	34.8
d.	Yes -	54.4	45.5	53.9
	No -	45.6	54.5	46.1
e.	Yes -	84.9	79.1	92.1
	No -	15.1	20.9	7.9
f.	Yes -	54.4	38.2	49.4
	No -	45.6	61.8	50.6
g.	Yes -	38.1	28.2	48.3
	No -	61.9	71.8	51.7
h.	Yes -	49.4	47.7	62.9
	No -	50.6	52.3	37.1
i.	Yes -	51.9	50.9	49.4
	No -	48.1	49.1	50.6
j.	Yes -	46.9	38.5	50.6
	No -	53.1	61.5	49.4
k.	Yes -	68.1	56.4	73.0
	No -	31.9	43.6	27.0
l.	Yes -	37.1	32.7	28.1
	No -	62.9	67.3	71.9

11. Mother Teaches

		Hm	C	Hd
a.	Yes -	81.3	80.0	92.1
	No -	18.8	20.0	7.9
b.	Yes -	81.9	79.8	82.0
	No -	18.1	20.2	18.0
c.	Yes -	70.4	51.8	51.7
	No -	29.6	48.2	48.3
d.	Yes -	68.1	75.5	61.8
	No -	31.9	24.5	38.2
e.	Yes -	56.9	54.5	60.7
	No -	43.1	45.5	39.3
f.	Yes -	96.3	94.5	96.6
	No -	3.8	5.5	3.4
g.	Yes -	71.9	59.1	64.0
	No -	28.1	40.9	36.0
h.	Yes -	83.1	75.5	83.1
	No -	16.9	24.5	16.9
i.	Yes -	61.9	50.0	50.6
	No -	38.1	50.0	49.4
j.	Yes -	45.0	40.9	42.7
	No -	55.0	59.1	57.3
k.	Yes -	73.1	70.0	76.4
	No -	26.9	30.0	23.6

Table E-39

HIGH/SCOPE HOME ENVIRONMENT SCALE
ITEMS SCORED FOR EACH SCALE

HES #1 - Warm mother and child involvement

3. Mother and child talk about child's activities
4. Child helps with household tasks
6. Mother joins child's play activities
8. Mother talks with child about child's feelings
10. Mother plays make-believe games with child

HES #2 - Playthings

9b. Child can play with scissors
9c. Child can play with scotch tape, paste, or stapler
9d. Child can play with jigsaw puzzles
9f. Child can play with paint or magic markers
9g. Child can play with clay or play-dough
9h. Child can play with "put-together" toys

HES #3 - Mother teaches child

11d. Mother teaches child to write name
11e. Mother teaches child to remember address
11g. Mother teaches child to recognize numbers
11h. Mother teaches child to say the "ABC's"
11i. Mother teaches child to recognize letters
11j. Mother teaches child to read words

HES #4 - Child does household tasks

5a. Child helps mother clean and peel food
5b. Child helps mother mix and bake things
5c. Child helps mother stir foods
5d. Child helps mother find food on shelves in store
5e. Child helps mother take off dishes after meal
5f. Child helps mother by putting clean clothes in drawers.

HES #5 - Books and time reads

1. Number of children's books at home
2. Someone reads stories to child

HES #6 - Television in home

7. Child watches television

Table E-40

HOME ENVIRONMENT SCALE
Item-Scale Correlations
by Group

	Item[1]	Home Start	Control	Head Start
Scale I	Warm Involvement	(N=160)	(N=110)	(N= 89)
	3	56	66	70
	4	56	59	50
	6	74	75	71
	8	59	55	68
	10	56	70	63
Scale II	Playthings	(N=160)	(N=110)	(N= 89)
	9b	42	54	52
	9c	65	68	50
	9d	60	69	51
	9f	64	62	52
	9g	53	60	51
	9h	65	52	54
Scale III	Mother Reaches	(N=160)	(N=110)	(N= 89)
	11d	59	42	58
	11e	58	59	54
	11g	69	63	63
	11h	46	56	52
	11i	72	74	69
	11j	71	71	53
Scale IV	Household Tasks	(N=160)	(N=110)	(N= 89)
	5a	69	68	58
	5b	64	63	55
	5c	62	66	66
	5d	53	54	65
	5e	62	58	50
	5f	64	62	62
Scale V	Books and Reading	(N=160)	(N=110)	(N= 89)
	1	81	78	72
	2	83	79	79

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[1] See key to items scored for each scale.

Table E-41

HOME ENVIRONMENT SCALE
Alpha Coefficients
by Group

		Home Start	Control	Head Start
Scale I	Warm Involvement	.57	.65	.65
Scale II	Playthings	.63	.67	.48
Scale III	Mother Teaches	.70	.68	.62
Scale IV	Household Tasks	.69	.69	.65
Scale V	Books and Reading	.52	.40	.24

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Table E-42

HOME ENVIRONMENT SCALE
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=156-159)		Control (N=102-110)		Home Start (N=108-110)		Head Start (N=86-88)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Playthings								
Fall '73	8.72	1.61	8.38	1.57	8.66	1.61	8.98	1.55
Fall '74	9.58	1.65	8.80	1.65	9.55	1.68	9.48	1.55
Difference	.86	1.80	.42	1.82	.88	1.73	.51	1.56
t ratio	6.01*		2.40*		5.34*		3.01	
Mother Teaches								
Fall '73	9.00	1.86	8.81	1.91	9.02	1.85	9.34	1.64
Fall '74	9.86	1.76	9.58	1.76	10.02	1.74	9.60	1.66
Difference	.86	2.12	.77	1.88	1.00	2.19	.26	1.75
t ratio	5.06*		4.27*		4.77*		1.39	
Household Tasks								
Fall '73	9.13	1.31	8.86	1.36	9.09	1.28	9.07	1.30
Fall '74	9.52	1.40	9.24	1.28	9.56	1.46	9.31	1.38
Difference	.39	1.35	.38	1.32	.46	1.36	.24	1.23
t ratio	3.59*		2.97*		3.51*		1.82	
Mother Involved								
Fall '73	10.62	2.35	10.24	2.58	10.57	2.35	10.62	1.93
Fall '74	10.15	2.23	10.05	2.43	10.15	2.10	10.10	2.14
Difference	-.47	2.49	-.19	2.64	-.42	2.36	-.51	2.08
t ratio	-2.34*		-.71		-1.86		-2.26*	
Books								
Fall '73	3.66	1.30	3.64	1.33	3.65	1.34	4.26	1.28
Fall '74	4.18	1.31	3.98	1.29	4.22	1.35	4.45	1.10
Difference	.52	1.37	.35	1.34	.57	1.37	.19	1.10
t ratio	4.72*		2.70*		4.36*		1.64	

*p<.05

Table E-43

HOME ENVIRONMENT SCALE
Item Scores--Home Start and Control, Six Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start, Means (N=159)				Control, Means (N=110)			
Books	1973	1974	Gain	Rank	1973	1974	Gain	Rank
1. No children's books in home	1.85	2.20	.35*	1	1.80	2.04	.24*	1
2. How often someone reads to child	1.81	1.97	.16*	2	1.84	1.95	.11	2

	Home Start, Means (N=156)				Control, Means (N=102)			
Mother Involved	1973	1974	Gain	Rank	1973	1974	Gain	Rank
4. Helps cook, clean	2.33	2.34	.01	1	2.35	2.34	-.01	2
3. Talking about child's pictures, friends	2.02	1.98	-.04	2	1.97	1.93	-.04	3.5
8. Talking about feelings	2.37	2.25	-.12	3	2.21	2.22	.01	1
6. Joins in child's games	2.37	2.23	-.14	4	2.25	2.14	-.11	5
10. Plays make-believe games	1.53	1.35	-.18*	5	1.46	1.42	-.04	3.5

	Home Start Percent "Yes" (N=159)				Control Percent "Yes" (N=109)			
Playthings	1973	1974	Gain	Rank	1973	1974	Gain	Rank
9b Scissors	60	86	26*	1.5	34	69	35*	1
9c Tape, paste, stapler	50	75	26*	1.5	38	52	15*	2
9f Paint or magic markers	35	55	19*	3	28	38	10	3
9d Jigsaw puzzles	44	55	11*	4	49	45	-04	4.5
9g Clay or playdoh	35	38	03	5	39	28	-10	6
9h Put-together toys	47	49	02	6	51	48	-04	4.5

	Home Start Percent "Yes" (N=159)				Control Percent "Yes" (N=109)			
other Teaches	1973	1974	Gain	Rank	1973	1974	Gain	Rank
11e Address and telephone number	37	57	19*	1	35	55	20*	2
11i Recognizes letters	45	62	17*	2	46	50	05	5.5
11d Writes name	53	68	15*	3.5	54	76	22*	1
11g Recognizes numbers	57	72	15*	3.5	47	60	13*	3.5
11j Reads words	34	45	11*	5	28	41	13*	3.5
11h ABC's	75	83	08	6	71	75	05	5.5

	Home Start Percent "Yes" (N=157)				Control Percent "Yes" (N=108)			
ousehold Tasks	1973	1974	Gain	Rank	1973	1974	Gain	Rank
5a Clean or peel food	29	42	13*	1	28	31	04	4
5c Stir when cooking	24	34	10*	2	23	26	03	5.5
5e Clear dishes	73	82	08*	3	66	80	14*	1
5f Put clean clothes away	76	82	06	4	74	82	08	2
5d Find food at store	79	83	04	5	73	76	03	5.5
5b Mix or bake	32	29	-03	6	22	29	06	3

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p≤.05

Items within each scale listed in order of decreasing mean or percent passing for Home Start.

Table E-44

HOME ENVIRONMENT SCALE
Item Scores--Home Start and Head Start, Four Sites
Fall 1973, Fall 1974 and Fall-Fall Gain[1]

Item	Home Start, Means (N=110)				Head Start, Means (N=8			
Books	1973	1974	Gain	Rank	1973	1974	Gain	Ra
1. No children's books in home	1.83	2.18	.35*	1	2.18	2.40	.22*	
2. How often someone reads to child	1.82	2.04	.22*	2	2.08	2.06	-.02	

	Home Start, Means (N=109)				Head Start, Means (N=8			
Mother Involved	1973	1974	Gain	Rank	1973	1974	Gain	Ra
4. Helps cook, clean	2.33	2.40	.07	1	2.29	2.22	-.07	
3. Talking about child's pictures, friends	2.04	1.96	-.07	2	2.19	2.15	-.03	
8. Talking about feelings	2.36	2.25	-.11	3	2.31	2.28	-.03	
6. Joins in child's games	2.39	2.24	-.15	4	2.34	2.07	-.27*	
10. Plays make-believe games	1.46	1.29	-.17*	5	1.49	1.38	-.10	

	Home Start Percent "Yes" (N=110)				Head Start Percent "Ye (N=87)			
Playthings	1973	1974	Gain	Rank	1973	1974	Gain	Ra
9b Scissors	65	90	25*	1	44	67	23*	
9c Tape, paste, stapler	53	74	21*	2	55	66	10	
9f Paint or magic markers	31	49	18*	3	43	51	08	
9d Jigsaw puzzles	43	55	12*	4	53	54	01	
9h Put-together toys	38	47	09	5	55	63	08	
9g Clay or playdoh	37	40	03	6	48	48	00	

	Home Start Percent "Yes" (N=110)				Head Start Percent "Ye (N=88)			
Mother Teaches	1973	1974	Gain	Rank	1973	1974	Gain	Ra
11e Address and telephone number	34	56	23*	1.5	47	60	14*	
11i Recognizes letters	44	66	23*	1.5	49	50	01	
11g Recognizes numbers	55	75	19*	3	68	64	-05	
11d Write name	59	73	14*	4	55	61	07	
11h ABC's	72	84	12*	5	78	83	05	
11j Read words	38	48	10	6	37	42	05	

	Home Start Percent "Yes" (N=108)				Head Start Percent "Ye (N=87)			
Household Tasks	1973	1974	Gain	Rank	1973	1974	Gain	Ra
5a Clean or peel food	29	47	19*	1	23	34	11	
5e Clear dishes	68	79	11*	2	67	79	13*	
5c Stir when cooking	24	33	09	3	28	30	02	
5f Put clean clothes away	75	82	07	4	79	77	-02	
5b Mix or bake	30	31	01	5	34	29	-06	
5d Find food at store	84	83	-01	6	76	82	06	

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*p≤.05

[1] Items within each scale listed in order of decreasing mean or percent passing for Home Start.

Mother Behavior Observation Scale (MBOS)

The Mother Behavior Observation Scale was completed for 351 of the 359 focal parents included in the previous data collections. The percent of reponses in each scoring category for each item is presented in Table E-45 for the total sample and each group. Most of the behaviors were observed very infrequently (for some categories, as many as 80-90% of the mothers were scored "never observed"). These results are comparable to last spring's, and like last spring, no differential pattern among the groups was discernable.

The items scored on the two scales are presented in Table E-46. The item-scale correlations are presented by group in Table E-47. The correlations ranged from 134 to 193. Home Start and Head Start figures were similar to each other and generally higher than the control group figures. Compared to previous test points, these correlations are somewhat higher.

The alpha coefficients for the Supportive scale for Home Start, control and Head Start were .86, .68, and .94, respectively. For the Punitive scale they were .82, .58, and .92. These figures generally replicated those obtained at previous test points.

The fall-to-fall growth analysis found the only significant growth to be for the Home Start group in the four-site analysis on the Punitive scale (Table E-48). Similarly, on only one individual item was significant gain found and that was for a negatively valued behavior (mother scolded child during visits) --see Tables E-49 and 50. In general, however, the psychometric properties of the MBOS are similar to those reported for previous data collections.

Table E-45

MOTHER BEHAVIOR OBSERVATION SCALE
ITEMS SCORED FOR EACH SCALE

HES - Observations: Supportive

1. Mother praised child during visits
3. Mother held child in lap during testing
6. Mother encouraged child during testing
8. Mother asked about child's progress during visits
10. Mother talked proudly about child

HES - Observations: Punitive

2. Mother scolded child during visits
4. Mother criticized child during testing
5. Mother coached child during testing
9. Mother threatened child during visits

Table E-46

MOTHER BEHAVIOR OBSERVATION SCALE
PERCENT RESPONSES IN EACH SCORING CATEGORY

(Item Ns range from 328 to 351)

	Group	Never Observed	Observed Once Or Twice	Observed Three Or More Times
1. Mother praised child	Hm	40.3	56.0	3.8
	C	53.6	42.7	3.6
	Hd	41.5	48.8	9.8
	Total	44.7	50.1	5.1
2. Mother scolded child	Hm	50.9	41.5	7.5
	C	72.7	24.5	2.7
	Hd	68.7	25.3	6.0
	Total	61.9	32.4	5.7
3. Mother held child in her lap	Hm	70.3	27.7	1.9
	C	73.4	23.9	2.8
	Hd	66.3	28.9	4.8
	Total	70.3	26.8	2.9
4. Mother interfered by negative comments	Hm	74.2	21.9	4.0
	C	80.0	18.2	1.8
	Hd	89.7	10.3	0
	Total	79.3	18.2	2.4
5. Mother interfered by coaching or giving answers	Hm	70.7	24.7	4.7
	C	75.5	21.8	2.7
	Hd	80.9	19.1	0
	Total	74.4	22.6	3.0
6. Mother made encouraging comments	Hm	49.3	48.0	2.7
	C	60.9	35.5	3.6
	Hd	47.8	42.0	10.1
	Total	52.9	42.6	4.6
7. Examples of art work displayed in home	Hm	76.7	21.4	1.9
	C	83.3	13.9	2.8
	Hd	96.7	3.3	0
	Total	82.6	15.5	1.8
8. Mother expressed interest in child's performance	Hm	60.4	37.7	1.9
	C	70.9	23.6	5.5
	Hd	54.9	40.2	4.9
	Total	62.4	33.9	3.7
9. Mother threatened child with later punishment	Hm	82.3	13.9	3.8
	C	87.3	9.1	3.6
	Hd	85.4	13.4	1.2
	Total	84.6	12.3	3.1
10. Mother talked proudly about child	Hm	52.8	42.1	5.0
	C	60.9	30.9	8.2
	Hd	53.7	40.2	6.1
	Total	55.6	38.2	6.3

Table E-47

MOTHER BEHAVIOR OBSERVATION SCALE
Item-Scale Correlations
by Group

	Item[1]	Home Start	Control	Head Start
Scale I	Supportive	(N=160)	(N=110)	(N= 89)
	1	83	81	93
	3	70	34	80
	6	82	60	91
	8	80	71	90
	10	82	80	90
Scale II	Punitive	(N=160)	(N=110)	(N= 89)
	2	84	66	92
	4	82	75	88
	5	78	51	87
	9	80	73	92

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[1] See key to items scored for each scale.

Table E-48

MOTHER BEHAVIOR OBSERVATION SCALE
FALL 1973 - FALL 1974 GROWTH

	Six-Site Analysis				Four-Site Analysis			
	Home Start (N=136-144)		Control (N=107-109)		Home Start (N-97-102)		Head Start (N=61-62)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Punitive								
Fall '73	5.14	1.65	5.05	1.49	5.02	1.45	5.08	1.71
Fall '74	5.38	1.60	4.96	1.28	5.45	1.53	4.79	1.08
Difference	.24	1.94	-.08	1.99	.43	1.72	-.29	1.69
t ratio	1.50		-.43		2.52*		-1.34	
Supportive								
Fall '73	7.51	1.94	6.99	1.87	7.55	1.88	7.52	2.22
Fall '74	7.29	1.65	7.06	1.83	7.23	1.62	7.74	2.32
Difference	-.22	2.38	.07	2.47	-.32	2.33	.21	3.17
t ratio	-1.07		.27		-1.35		.52	

*p<.05

Table E-49

MOTHER BEHAVIOR OBSERVATION SCALE
Item Means--Home Start and Control, Six Sites
Fall 1973, Fall 1974 and Fall-Fall Gain

Item	Home Start (N=136)				Control (N=107)			
	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Supportive								
1. Mother praised child during visits.	1.57	1.62	.06	1	1.43	1.50	.07	1
6. Mother encouraged child during testing.	1.47	1.51	.04	2	1.47	1.44	-.03	5
3. Mother held child in lap during visits.	1.26	1.28	.01	3	1.30	1.29	-.01	3
8. Mother asked about child's progress during visits.	1.53	1.40	-.13	4	1.36	1.35	-.02	4
10. Mother talked proudly about child.	1.68	1.49	-.20*	5	1.43	1.48	.05	2

Item	Home Start (N=144)				Control (N=109)			
	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Punitive								
2. Mother scolded child during visits.	1.36	1.56	.19*	1	1.39	1.30	-.09	4
9. Mother threatened child during visits.	1.15	1.22	.08	2	1.22	1.17	-.06	3
4. Mother criticized child during testing.	1.26	1.28	.03	3	1.18	1.22	.04	1
5. Mother coached child during testing.	1.37	1.32	-.06	4	1.25	1.28	.03	2

Table E-50

MOTHER BEHAVIOR OBSERVATION SCALE
Item Means--Home Start and Head Start, Four Sites
Fall 1973, Fall 1974 and Fall-Fall Gain

	Home Start (N=97)				Head Start (N=61)			
Item	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Supportive								
6. Mother encouraged child during testing.	1.45	1.52	.06	1	1.54	1.64	.10	2
1. Mother praised child during visits.	1.58	1.63	.05	2	1.61	1.72	.11	1
3. Mother held child in lap during testing.	1.27	1.28	.01	3	1.41	1.34	-.07	5
8. Mother asked about child's progress during visits.	1.54	1.33	-.21*	4	1.44	1.48	.03	3.5
10. Mother talked proudly about child.	1.71	1.47	-.24*	5	1.52	1.56	.03	3.5

	Home Start (N=102)				Head Start (N=62)			
	1973	1974	Gain	Rank	1973	1974	Gain	Rank
Punitive								
2. Mother scolded child during visits.	1.36	1.59	.23*	1	1.47	1.37	-.10	3
9. Mother threatened child during visits.	1.13	1.24	.11	2	1.19	1.16	-.03	1
4. Mother criticized child during testing.	1.20	1.26	.07	3	1.15	1.10	-.05	2
5. Mother coached child during testing.	1.33	1.36	.03	4	1.27	1.16	-.11	4

Parent Interview

The Parent Interview was originally developed to obtain information about the child'd medical history, the parent's involvement in activities outside the home, and the parent's use of community resources. It was also used as a vehicle for obtaining feedback from parents on their reactions to the programs themselves.

In spring of 1974 several questions were added to the interview and due to the resulting increase in administration time the interview was divided into two sections administered on successive visits. In fall of 1974 several questions were added which were specific to parents of children who had entered kindergarten. There was also a requirement to obtain information on the new families entering the evaluation. In order to make administration more straight-forward those questions which pertained only to new and kindergarten families were split out into two new interview booklets. The family groupings and corresponding interview booklets were:

IA	Previously tested non-kindergarten families
IB	Previously tested kindergarten families
IIA	All families previously tested
IIB	All previously untested families

Some of the new questions dealt with:

- date of entry into kindergarten
- participation in cummer activities
- several questions about the home visitor
- whether parents rented or owned their home

Several questions designed to assess the parents sense of control were not asked in fall 1974 since the response distributaions of the spring data were clustered into the same categories for over 80% of the respondents.

Results of the fall 1974 Parent Interview data collection are presented in Tables E-51 through E-54.

Table E-51

PARENT INTERVIEW 1A
HEAD START AND HOME START FAMILIES ONLY

	Home Start	Control	Head Start	Total Sample
Sex of Child	(N=130)	(N=179)	(N=157)	(N=466)
Male	53.1%	54.2%	55.4%	54.3%
Female	46.9	45.8	44.6	45.7
This family is in:	(N=128)	(N=179)	(N=157)	(N=464)
Home Start	100.0	100.0	1.3	66.6
Head Start	.0	.0	98.7	33.4
Home Visitor Present:	(N=122)	(N=176)	(N= 27)	(N=325)
No	58.2	42.6	100.0	53.2
Yes	41.8	57.4	.0	46.8
Ethnicity of Child:	(N=130)	(N=179)	(N=157)	(N=466)
Black	39.2	31.8	47.8	39.3
Mexican-American	4.6	6.7	1.3	4.3
Caucasian	55.4	59.2	49.7	54.9
Other	1.5	.8	2.2	1.2
9. WHAT ARE SOME OF THE THINGS THAT ______ ESPECIALLY LIKES ABOUT HEAD START OR HOME START?	(N=130)	(N=179)	(N=154)	(N=463)
Nonspecific, Positive	12.3	10.6	16.9	13.2
Educational Activities/Educational Play	35.4	43.5	34.3	37.9
Socializing/Social Activities	21.6	10.6	51.3	27.1
Field Trips	16.9	3.9	31.6	7.3
Group Meetings	1.5	.0	.0	.4
Home Visitor/Teacher	19.9	8.3	7.8	11.4
Health/Medical	.0	.0	.0	.0
Other	4.6	93.5	3.1	15.3
0. WHAT THINGS DOESN'T HE (SHE) LIKE ABOUT HEAD START OR HOME START?	(N=128)	(N=128)	(N=152)	(N=408)
Nonspecific, Negative	3.1	.8	2.0	2.0
Educational Activities/Play	2.3	1.6	.0	1.2
Social Activities	.0	1.6	.0	.5
Nutritional Activities	4.7	.8	1.3	2.2
Positive Comment	75.8	75.8	69.7	73.5
When Mother Goes	.8	.0	.0	.2
Leave Home	.8	1.6	.7	1.0
Sit Still	.0	2.3	.7	1.0
Other	11.7	15.6	17.8	15.2
Teacher	.8	.0	1.3	.7
Naps	.0	.0	6.6	2.5

(Continued)

	Home Start	Control	Head Start	Total Sampl
11. WHAT OTHER THINGS DO YOU THINK THE PROGRAM SHOULD DO FOR ____________?	(N=128)	(N=140)	(N=154)	(N=422
Nonspecific, Positive	70.3	54.3	69.5	64.7
School Readiness	5.5	12.1	14.3	10.9
More Field Trips	2.3	.0	1.3	1.2
Social Adjustment	2.3	5.7	4.5	4.3
Uninterpretable	10.2	22.1	2.6	11.4
Home Visit Longer	3.1	1.4	.0	1.4
Other	6.3	4.3	7.8	6.2
12. WHAT ARE SOME OF THE THINGS THAT YOU'RE GETTING OUT OF THE PROGRAM?	(N=125)	(N=123)	(N=152)	(N=400
Nonspecific, Positive	22.4	22.8	33.6	26.8
Educational Activities	5.6	.8	.7	2.3
Socializing With Home Visitor	2.4	.0	.0	.8
Field Trips	1.6	.0	.0	.5
Group Meetings	14.4	5.7	7.9	9.3
Nutrition Help	1.6	2.4	.0	1.3
Health/Medical Help	3.2	2.4	.7	2.0
Arts and Crafts	1.6	.0	.0	.5
Negative Comment	4.8	3.3	4.6	4.3
Other	8.0	21.1	9.2	12.5
Improved Parent Teaching	25.6	36.6	22.4	27.8
Allows Mother to Work/Rest	8.8	4.9	21.1	12.3
13. WHAT ARE SOME OF THE OTHER THINGS YOU THINK THE PROGRAM SHOULD DO FOR YOU?	(N=128)	(N=137)	(N=152)	(N=417
Nonspecific Comment	77.3	53.3	77.6	69.5
Educational	1.6	3.6	1.3	2.2
Personal-Social Gains	.0	.0	.7	.2
Using Community Resources	.8	.0	.0	.2
Benefit to Child	.8	2.9	.0	1.2
Don't Know/Not Codable	12.5	31.4	7.9	17.0
Improved Parent Teaching	.0	2.2	.0	.7
Parent-Child Interaction	.0	.7	2.0	1.0
Improved Approach to Child	.0	1.5	2.0	1.2
Other	7.0	4.4	8.6	6.7

HOME START ONLY

HM 14. AS YOU KNOW, YOUR HOME VISITOR HAS TO DIVIDE HER TIME BETWEEN A NUMBER OF FAMILIES. WOULD IT BE HELPFUL IF SHE WERE ABLE TO VISIT MORE OFTEN?	(N=126)	(N=133)	(N= 0)	(N=259
No	43.7	31.6		37.5
Yes	56.3	68.4		62.5

(Continued)

	Home Start	Control	Head Start	Total Sample
14A. HOW OFTEN WOULD YOU LIKE HER TO VISIT?	(N= 63)	(N= 78)	(N= 0)	(N=141)
Once a Month	.0	1.3		.7
Once/Two Weeks	1.6	2.6		2.1
Once/Week	12.7	14.1		13.5
Twice/Week	74.6	71.8		73.0
Three Times/Week	4.8	3.8		4.3
Every Other Day	1.6	1.3		1.4
Once/Day	4.8	5.1		5.0
4B. HOW OFTEN DOES SHE VISIT NOW?	(N= 59)	(N= 54)	(N= 0)	(N=113)
Once/Month or Less	1.7	.0		.9
Once/Two Weeks	3.4	.0		1.8
Once/Week	91.5	98.1		94.7
Twice/Week	3.4	1.9		2.7
M 15. WOULD IT BE HELPFUL IF SHE WERE ABLE TO STAY LONGER EACH VISIT?	(N=125)	(N=127)	(N= 0)	(N=252)
No	61.6	50.4		56.0
Yes	38.4	49.6		44.0
5A. HOW LONG WOULD YOU LIKE HER TO STAY EACH VISIT?	(N= 41)	(N= 53)	(N= 0)	(N= 94)
Time in Minutes	144.0	131.0		137.0
5B. ABOUT HOW LONG DOES SHE STAY EACH VISIT?	(N= 78)	(N= 69)	(N= 0)	(N=147)
Time in Minutes	76.2	78.8		77.4
M 16. DOES YOUR HOME VISITOR VISIT AT THE SAME TIME EACH WEEK?	(N=123)	(N=124)	(N= 0)	(N=247)
No	13.0	17.7		15.4
Yes	87.0	82.3		84.6
M 17. DO YOU EVER ASK YOUR HOME VISITOR TO SKIP A VISIT BECAUSE YOU ARE PLANNING TO BE GONE?	(N=128)	(N=126)	(N= 0)	(N=254)
No	57.8	77.0		67.3
Yes	42.2	23.0		32.7
M 18. HOW DOES YOUR HOME VISITOR LET YOU KNOW WHEN SHE CAN'T COME FOR A REGULAR VISIT?	(N=124)	(N=125)	(N= 0)	(N=249)
Always Visits	15.3	36.8		26.1
Calls/Phones	62.1	47.2		54.6
Never Visited	1.6	.8		1.2
No Contact	.8	1.6		1.2
Third Party	1.6	2.4		2.0
Written Communication	8.1	3.2		5.6
Comes By To Tell Me	10.5	8.0		9.2

(Continued)

HEAD START ONLY

	Home Start	Control	Head Start	Total Sampl
20. HOW MUCH TIME HAVE YOU SPENT IN THE LAST TWO WEEKS VISITING OR WORKING IN THE HEAD START CENTER?	(N= 0)	(N= 1)	(N= 49)	(N= 5
Time in Minutes		100.0	314.3	310.0
21. HAS ANY HEAD START STAFF MEMBER SPENT ANY TIME IN YOUR HOME DURING THE LAST MONTH?	(N= 0)	(N= 0)	(N=157)	(N=157
No			69.4	69.4
Yes			30.6	30.6
25. HOW MUCH TIME DID HE (SHE) SPEND IN YOUR HOME DURING THE LAST MONTH?	(N= 0)	(N= 0)	(N= 46)	(N= 46
Time in Minutes			94.2	94.2
22. HOW MUCH TIME DOES ____________ SPEND IN THE HEAD START CENTER?	(N= 0)	(N= 0)	(N=156)	(N=156
Time in Hours			5.5	5.5
23. HOW MANY DAYS A WEEK DOES ____________ SPEND IN THE CENTER?	(N= 0)	(N= 0)	(N=156)	(N=156
Time in Days				4.7

HOME START AND HEAD START

	Home Start	Control	Head Start	Total Sampl
24. WHICH OF THE FOLLOWING HEAD START OR HOME START ACTIVITIES DID YOU OR ____________ PARTICIPATE IN THIS SUMMER?				
HOME VISITS/CLASSROOM ACTIVITIES	(N=129)	(N=174)	(N=156)	(N=459
No	35.7	87.4	57.1	62.5
Yes	64.3	12.6	42.9	37.5
FIELD TRIPS	(N=129)	(N=175)	(N=156)	(N=460
No	38.8	92.0	55.8	64.8
Yes	61.2	8.0	44.2	35.2
MEETINGS	(N=129)	(N=175)	(N=156)	(N=460
No	48.8	86.3	62.2	67.6
Yes	51.2	13.7	37.8	32.4
OTHER GET TOGETHERS SUCH AS PICNICS	(N=129)	(N=175)	(N=156)	(N=460
No	57.4	95.4	73.7	77.4
Yes	42.6	4.6	26.3	22.6
25. HAVE YOU HEARD OF A GROUP CALLED THE PARENT POLICY COUNCIL OR COMMITTEE? IT MAY ALSO BE CALLED A PARENT POLICY BOARD, PARENT ADVISORY COMMITTEE, PAC OR PC.	(N=130)	(N=173)	(N=156)	(N=459
No	31.5	72.8	41.7	50.5
Yes	68.5	27.2	58.3	49.5

(Continued)

	Home Start	Control	Head Start	Total Sample
26. HAVE YOU BEEN TO ONE OF THEIR MEETINGS SINCE JUNE?	(N= 89)	(N= 48)	(N= 91)	(N=228)
No	76.4	81.3	68.1	74.1
Yes	23.6	18.8	31.9	25.9
27. WHAT KIND OF THINGS WERE DISCUSSED AT THIS MEETING?	(N= 20)	(N= 9)	(N= 30)	(N= 59)
Nonspecific Comment	10.0	11.1	3.3	6.8
Policies/Elections	25.0	55.6	43.3	39.0
Health	.0	.0	3.3	1.7
Planning Group Activities	20.0	22.2	13.3	16.9
Other	20.0	.0	16.7	15.3
Policies of Program and Planning	25.0	11.1	20.0	20.3
28. ARE THERE THINGS YOU THINK SHOULD BE BROUGHT UP AT THIS MEETING THAT HAVE NOT BEEN DISCUSSED?	(N= 20)	(N= 9)	(N= 29)	(N= 58)
No	95.0	100.0	100.0	98.3
Yes	5.0	.0	.0	1.7
29. WHAT?	(N= 2)	(N= 0)	(N= 0)	(N= 2)
Getting More Parents	100.0			100.0
Involved/Equal Rights, ETC.	.0			.0

Table E-52

PARENT INTERVIEW 1B
KINDERGARTEN FAMILIES ONLY

	KM	KC	KD	Total
Sex of child:	(N= 32)	(N= 30)	(N= 6)	(N= 68
Male	53.1	43.3	83.3	51.5
Female	46.9	56.7	16.7	48.5
The family code is:	(N= 32)	(N= 30)	(N= 6)	(N= 68
KC	100.0	6.7	.0	50.0
KM	.0	90.0	16.7	41.2
KD	.0	3.3	83.3	8.8
Ethnicity of child:	(N= 32)	(N= 30)	(N= 6)	(N= 68
Black	31.3	43.3	50.0	38.2
Mexican-American	3.1	3.3	33.3	5.9
Caucasian	62.5	50.0	16.7	52.9
Other	3.1	3.3	.0	2.9
9. WHEN DID ____________ FIRST ENTER KINDERGARTEN OR ANOTHER PROGRAM?	(N= 15)	(N= 11)	(N= 4)	(N= 30
Time in Months	1.9	2.5	5.2	2.6
10. WHICH OF THE FOLLOWING HEAD START OR HOME START ACTIVITIES DID YOU OR ____________ PARITICIPATE IN THIS SUMMER?				
HOME VISITS/CLASSROOM ACTIVITIES	(N= 30)	(N= 2)	(N= 5)	(N= 37
No	30.0	100.0	60.0	37.8
Yes	70.0	.0	40.0	62.2
FIELD TRIPS	(N= 30)	(N= 2)	(N= 5)	(N= 37
No	40.0	100.0	40.0	43.2
Yes	60.0	.0	60.0	56.8
MEETINGS	(N= 30)	(N= 2)	(N= 5)	(N= 37
No	30.0	100.0	40.0	35.1
Yes	70.0	.0	60.0	64.9
OTHER GET TOGETHERS SUCH AS PICNICS	(N= 30)	(N= 2)	(N= 5)	(N= 37
No	40.0	100.0	20.0	40.5
Yes	60.0	.0	80.0	59.5

(Continued)

11. HAVE YOU HEARD OF A GROUP CALLED THE PARENT POLICY COUNCIL OR COMMITTEE? IT MAY ALSO BE CALLED A PARENT POLICY BOARD, PARENT ADVISORY COMMITTEE, PAC OR PC.

	KM (N= 30)	KC (N= 3)	KD (N= 5)	Total (N= 38)
No	30.0	66.7	.0	28.9
Yes	70.0	33.3	100.0	71.1

12. HAVE YOU BEEN TO ONE OF THEIR MEETINGS SINCE JUNE?

	(N= 21)	(N= 1)	(N= 5)	(N= 27)
No	66.7	100.0	80.0	70.4
Yes	33.3	.0	20.0	29.6

Table E-53

PARENT INTERVIEW 11A
FOR HOME START, HEAD START AND KINDERGARTEN FAMILIES

Location of family's residence	Home Start (N=160)	Control (N=108)	Head Start (N= 89)	Total Sampl (N=357
On a farm or in the country	46.2%	47.2%	21.3%	40.3
In a small town or in a city	53.7	52.8	78.7	59.7

Was the Home Visitor present during the Interview?

	Home Start (N=142)
No	57.7%
Yes	41.5
Blank	.7

This family is in:

	Home Start (N=160)	Control (N=109)	Head Start (N= 89)	Total Sampl (N=358
Home Start	80.6%	71.6%	1.1%	58.1
Head Start	1.9	0	92.1	23.7
Kindergarten	17.5	28.4	6.7	18.2

1. I'D LIKE TO ASK YOU SOME QUESTIONS ABOUT YOU AND YOUR FAMILY. SOME OF THE QUESTIONS ARE THE SAME AS THE ONES WE ASKED YOU ABOUT SIX MONTHS AGO. WE'D LIKE TO ASK YOU AGAIN TO FIND OUT IF WE WROTE DOWN EXACTLY WHAT YOU TOLD US AND TO SEE IF ANYTHING HAS CHANGED SINCE WE LAST SPOKE WITH YOU. THE FIRST QUESTIONS ARE ABOUT YOUR CHILDREN.

Did _____________ have any shots since last May?

		Home Start (N=159)	Control (N=107)	Head Start (N= 89)	Total Sampl (N=355
No		69.8%	64.5%	55.1%	64.5
Yes		30.2	35.5	44.9	35.5
		(N= 43)	(N= 36)	(N= 37)	(N=116
DPT:	Yes	67.4%	75.0%	62.2%	68.1
	No	16.3	13.9	24.3	18.1
	Don't Know	16.3	11.1	13.5	13.8
POLIO:		(N= 43)	(N= 35)	(N= 38)	(N=116
	Yes	67.4	80.0	57.9	68.1
	No	16.3	11.4	31.6	19.8
	Don't Know	16.3	8.6	10.5	12.1
MEASLES:		(N= 37)	(N= 33)	(N= 36)	(N=106
	Yes	51.4	63.6	44.4	52.8
	No	29.7	24.2	41.7	32.1
	Don't Know	18.9	12.1	13.9	15.1

2. ARE YOU ____________'S:	Home Start (N=160)	Control (N=109)	Head Start (N= 89)	Total Sample (N=358)
MOTHER?	93.8%	92.7%	93.3%	93.3%
FATHER?	1.9	.9	4.5	2.2
OLDER SISTER (OR BROTHER)?	.0	.0	.0	.0
GRANDMOTHER, AUNT OR OTHER RELATIVE?	3.7	5.5	2.2	3.9
BABYSITTER, NEIGHBOR, OR FRIEND?	.6	.9	.0	.6
3. WHEN WAS THE LAST TIME ____________WENT TO A DOCTOR?	(N=132)	(N= 79)	(N= 72)	(N=283)
Time in months:	5.7	7.7	4.2	5.9
4. WAS THIS LAST VISIT FOR A CHECK-UP, OR FOR SOMETHING WRONG?	(N=158)	(N=104)	(N= 87)	(N=349)
Check-up	58.2	31.7	56.3	49.9
Something Wrong	41.8	68.3	43.7	50.1
WHAT WAS WRONG?	(N= 95)	(N= 72)	(N= 39)	(N=176)
Measles, mumps, chicken pox	1.5	1.4	.0	1.1
Accidental Injury	20.0	5.6	15.4	13.1
Infection	6.2	8.3	12.8	8.5
Other	72.3	84.7	71.8	77.3
5. HOW IS IT BEING PAID FOR?	(N=155)	(N=103)	(N= 86)	(N=344)
Personal Funds	28.4	55.3	23.3	35.2
HM or HD	37.4	7.8	45.3	30.5
Free Clinic	10.3	6.8	4.7	7.8
ADC	1.9	5.8	.0	2.6
Medicaid	9.7	12.6	14.0	11.6
Welfare	9.7	7.8	5.8	8.1
Insurance	2.6	2.9	4.7	3.2
EDC	.0	1.0	2.3	.9
6. WHEN ARRANGING FOR THIS VISIT TO THE DOCTOR, OR WHEN MAKING IT, DID YOU HAVE HELP FROM ANYONE OUTSIDE YOUR FAMILY?	(N=157)	(N=103)	(N= 87)	(N=347)
No	57.3	87.4	51.7	64.8
Yes	42.7	12.6	48.3	35.2
7. WHO HELPED YOU?	(N= 67)	(N= 13)	(N= 42)	(N=122)
Home Visitor	88.1	46.2	2.4	54.1
Head Start Staff	3.0	23.1	92.9	36.1
Other	9.0	30.8	4.8	9.8
8. (If you know the answer to 8, check but do not ask.) IS HE (SHE) FROM HEAD START OR HOME START?	(N= 67)	(N= 13)	(N= 42)	(N=122)
No	9.0	30.8	4.8	9.8
Yes	91.0	69.2	95.2	90.2

(Continued)

	Home Start	Control	Head Start	Total Sample
9. HOW DID HE (SHE) HELP?	(N= 66)	(N= 13)	(N= 41)	(N=120
Made Appointment	27.3	23.1	26.8	26.7
Transportation	27.3	38.5	19.5	25.8
Both of Above	42.4	30.8	48.8	43.3
Other	3.0	7.7	4.9	4.2
10. WHEN WAS THE LAST TIME _____________WENT TO A DENTIST?	(N=126)	(N= 23)	(N= 71)	(N=220
Time in Months:	6.5	4.9	5.0	5.8
11. WAS THIS LAST VISIT FOR A CHECK-UP OR FOR SOMETHING WRONG?	(N=144)	(N= 25)	(N= 83)	(N=252
Check-up	66.0	56.0	80.7	69.8
Something Wrong	34.0	44.0	19.3	30.2
WHAT WAS WRONG?	(N= 55)	(N= 11)	(N= 17)	(N= 83
Toothache or Cavity	72.7	54.5	88.2	73.5
Gum Disease	.0	.0	.0	.0
Accidental Injury	1.8	.0	.0	1.2
Other	25.5	45.5	11.8	25.3
12. HOW IS IT BEING PAID FOR?	(N=142)	(N= 24)	(N= 83)	(N=249
Personal Funds	5.6	33.3	3.6	7.6
HM or HD	77.5	16.7	85.5	74.3
Free Clinic	6.3	12.5	.0	4.8
ADC	.7	8.3	.0	1.2
Medicaid	4.9	16.7	6.0	6.4
Welfare	4.2	8.3	1.2	3.6
Insurance	.7	.0	.0	.4
EDC	.0	4.2	3.6	1.6
13. WHEN ARRANGING FOR THIS VISIT, OR WHEN MAKING IT, DID YOU HAVE HELP FROM ANYONE OUTSIDE YOUR FAMILY?	(N=144)	(N= 25)	(N= 82)	(N=251
No	16.0	68.0	11.0	19.5
Yes	84.0	32.0	89.0	80.5
14. WHO HELPED YOU?	(N=122)	(N= 8)	(N= 73)	(N=203
Home Visitor	95.1	37.5	5.5	60.6
Head Start Staff	.8	25.0	91.8	34.5
Other	4.1	37.5	2.7	4.9
15. (If you know the answer to 15, check but do not ask.) IS HE (SHE) FROM HEAD START OR HOME START?	(N=120)	(N= 8)	(N= 73)	(N=201
No	4.2	37.5	2.7	5.0
Yes	95.8	62.5	97.3	95.0
16. HOW DID HE (SHE) HELP?	(N=122)	(N= 8)	(N= 72)	(N=202
Made Appointment	33.6	12.5	15.3	26.2
Transportation	22.1	37.5	29.2	25.2
Both of Above	42.6	37.5	52.8	46.0
Other	1.6	12.5	2.8	2.5

(Continued)

17. WE'D LIKE TO FIND OUT THE MOST SERIOUS ACCIDENTS __________ HAS HAD SINCE LAST MAY. I'LL READ SOME KINDS OF ACCIDENTS AND YOU TELL ME IF ANY HAVE HAPPENED TO __________.

	Home Start	Control	Head Start	Total Sample
FALLS:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	88.7	90.8	92.1	90.2
Treated at Home	5.0	6.4	4.5	5.3
Treated by Doctor/Clinic/Hospital	5.0	1.8	3.4	3.6
Stayed Overnight in Hospital	1.2	.9	.0	.8
BLOWS/WAS HIT:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	94.4	91.7	91.0	92.7
Treated at Home	3.1	4.6	7.9	4.7
Treated by Doctor/Clinic/Hospital	1.9	3.7	1.1	2.2
Stayed Overnight in Hospital	.6	.0	.0	.3
CUTS:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	93.1	94.5	87.6	92.2
Treated at Home	3.1	4.6	7.9	4.7
Treated by Doctor/Clinic/Hospital	3.7	.9	4.5	3.1
Stayed Overnight in Hospital	.0	.0	.0	.0
ANIMAL BITES:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	95.0	95.4	98.9	96.1
Treated at Home	3.7	2.8	1.1	2.8
Treated by Doctor/Clinic/Hospital	1.2	.9	.0	.3
Stayed Overnight at Hospital	.0	.9	.0	.3
NEAR SUFFOCATION:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	100.0	99.1	100.0	99.7
Treated at Home	.0	.9	.0	.3
Treated by Doctor/Clinic/Hospital	.0	.0	.0	.0
Stayed Overnight at Hospital	.0	.0	.0	.0
POISONING:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	99.4	97.2	100.0	98.9
Treated at Home	.6	1.8	.0	.8
Treated by Doctor/Clinic/Hospital	.0	.9	.0	.3
Stayed Overnight at Hospital	.0	.0	.0	.0
NEAR DROWNING:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	100.0	98.2	100.0	99.4
Treated at Home	.0	1.8	.0	.6
Treated by Doctor/Clinic/Hospital	.0	.0	.0	.0
Stayed Overnight at Hospital	.0	.0	.0	.0
BURNS:	(N=160)	(N=109)	(N= 89)	(N=358)
No Accidents	96.2	97.2	96.6	96.6
Treated at Home	3.7	2.8	3.4	3.4
Treated by Doctor/Clinic/Hospital	.0	.0	.0	.0
Stayed Overnight at Hospital	.0	.0	.0	.0

(Continued)

	Home Start	Control	Head Start	Total Sample
ELECTRIC SHOCKS:	(N=160)	(N=109)	(N= 89)	(N=358
No Accidents	99.4	100.0	98.9	99.4
Treated at Home	.6	.0	1.1	.6
Treated by Doctor/Clinic/Hospital	.0	.0	.0	.0
Stayed Overnight at Hospital	.0	.0	.0	.0
AUTOMOBILE ACCIDENTS:	(N=160)	(N=109)	(N= 89)	(N=358
No Accidents	100.0	100.0	100.0	100.0
Treated at Home	.0	.0	.0	.0
Treated by Doctor/Clinic/Hospital	.0	.0	.0	.0
Stayed Overnight at Hospital	.0	.0	.0	.0
OTHER:	(N=160)	(N=109)	(N= 89)	(N=358
No Accidents	98.7	98.2	95.5	97.8
Treated at Home	.0	1.8	2.2	1.1
Treated by Doctor/Clinic/Hospital	1.2	.0	2.2	1.1
Stayed Overnight at Hospital	.0	.0	.0	.0
18. DO YOU NOW HAVE A PAYING JOB?	(N=160)	(N=109)	(N= 89)	(N=358
No	77.5	78.9	36.0	67.6
Yes	22.5	21.1	64.0	32.4
19. DID YOU HAVE THIS SAME JOB LAST FALL?	(N= 36)	(N= 22)	(N= 59)	(N=117
No	50.0	40.9	27.1	36.8
Yes	50.0	59.1	72.9	63.2
DID HM/HD ASSIST YOU IN GETTING THIS JOB?	(N= 18)	(N= 8)	(N= 16)	(N= 42
No	94.4	100.0	100.0	97.6
Yes	5.6	.0	.0	2.4
HOW DID THEY HELP?	(N= 1)	(N= 0)	(N= 0)	(N= 1
Told about job	100.0	.0	.0	100.0
20. IS IT FULL TIME, REGULAR PART TIME, OR OCCASIONAL PART TIME?	(N= 18)	(N= 9)	(N= 16)	(N= 43
Full Time	61.1	55.6	87.5	69.8
Regular Part Time	33.3	33.3	6.3	23.3
Occasional Part Time	5.6	11.1	6.3	7.0
21. WHAT KIND OF WORK DO YOU DO? See text for information on occupations.				
22. DOES ANYONE (ELSE) IN YOUR FAMILY CURRENTLY EARN AN INCOME THAT IS USED TO SUPPORT THE FAMILY?	(N=160)	(N=109)	(N= 89)	(N=358
No	46.9	36.7	62.9	47.8
Yes	53.1	63.3	37.1	52.2

(Continued)

	Home Start	Control	Head Start	Total Sample
23. WHO?	(N= 84)	(N= 69)	(N= 32)	(N=185)
Mother	2.4	1.4	9.4	3.2
Father-Husband	89.3	95.7	87.5	91.4
Older Sibling	1.2	.0	.0	.5
Grandparents/Other Relative	6.0	1.4	3.1	3.8
Babysitter/Friend/Neighbor	1.2	.0	.0	.5
Wife and Husband	.0	1.4	.0	.5
WHO CONTRIBUTES THE MOST?	(N= 2)	(N= 1)	(N= 0)	(N= 3)
Mother	50.0	.0	.0	33.3
Father/Husband	.0	100.0	.0	33.3
Relatives	50.0	.0	.0	33.3
24. DID HE/SHE HAVE THE SAME JOB LAST FALL?	(N= 83)	(N= 68)	(N= 33)	(N=184)
No	25.3	17.6	15.2	20.7
Yes	74.7	82.4	84.8	79.3
DID HM/HD ASSIST?	(N= 21)	(N= 12)	(N= 3)	(N= 36)
No	100.0	100.0	100.0	100.0
Yes	.0	.0	.0	.0
HOW DID THEY ASSIST?	(N= 0)	(N= 0)	(N= 0)	(N= 0)
25. IS HIS (HER) JOB FULL TIME, REGULAR PART TIME, OR OCCASIONAL PART TIME?	(N= 20)	(N= 12)	(N= 5)	(N= 37)
Full	75.0	91.7	80.0	81.1
Regular Part	10.0	.0	20.0	8.1
Occasional Part	15.0	8.3	.0	10.8
26. WHAT KIND OF WORK DOES HE (SHE) DO? See text for occupational information.				
27. WHAT IS THE HIGHEST GRADE HE (SHE) HAS COMPLETED IN SCHOOL?	(N= 18)	(N= 12)	(N= 5)	(N= 35)
Grade: 1	5.6	.0	.0	2.9
6	5.6	8.3	.0	5.7
8	16.7	8.3	40.0	17.1
9	22.2	8.3	.0	14.3
10	16.7	25.0	.0	17.1
11	5.6	8.3	.0	5.7
12	27.8	33.3	60.0	34.3
13	.0	8.3	.0	2.9
28. DO YOU OWN YOUR HOME OR ARE YOU RENTING?	(N=159)	(N=109)	(N= 89)	(N=357)
Own	34.0	32.1	37.1	34.2
Rent	54.7	54.1	50.6	53.5
Live in Home of Relative	8.2	5.5	5.6	6.7
Other	3.1	8.3	6.7	5.6
29. DO YOU LIVE:	(N= 21)	(N= 14)	(N= 81)	(N=116)
On a Farm or Open Country	14.3	28.6	22.2	21.6
In a Small Town or in a City	85.7	71.4	77.8	78.4

(Continued)

	Home Start	Control	Head Start	Total Sample
30. NOW I'M GOING TO READ A LIST OF COMMUNITY GROUPS AND ORGANIZATIONS. TELL ME IF YOU OR ANYONE ELSE IN YOUR FAMILY IS NOW ACTIVE IN ANY OF THEM.	(N=158)	(N=109)	(N= 89)	(N=356
PARENT-TEACHER ASSOCIATION?				
No	81.0	84.4	68.5	78.9
Yes	19.0	15.6	31.5	21.1
BOY SCOUTS, GIRL SCOUTS, 4-H CLUB, OR OTHER YOUTH GROUPS?	(N=159)	(N=109)	(N= 89)	(N=357
No	86.2	90.8	80.9	86.3
Yes	13.8	9.2	19.1	13.7
CHURCH ORGANIZATIONS OR SOCIAL CLUBS?	(N=159)	(N=109)	(N= 89)	(N=357
No	66.7	60.6	48.3	60.2
Yes	33.3	39.4	51.7	39.8
ANY POLITICAL ORGANIZATION?	(N=159)	(N=109)	(N= 89)	(N=357
No	98.7	97.2	97.8	98.0
Yes	1.3	2.8	2.2	2.0
OTHER?	(N=156)	(N=102)	(N= 85)	(N=343
No	94.2	98.0	85.9	93.3
Yes	5.8	2.0	14.1	6.7
31. ARE YOU TAKING ANY COURSES OR GOING TO SCHOOL?	(N=159)	(N=109)	(N= 89)	(N=357
No	89.9	94.5	92.1	91.9
Yes	10.1	5.5	7.9	8.1
32. WHAT LEVEL OF EDUCATION?	(N= 15)	(N= 6)	(N= 7)	(N= 28
Adult Education	40.0	33.3	14.3	32.1
High School	20.0	50.0	28.6	28.6
College Courses	40.0	16.7	57.1	39.3
33. NOW I'M GOING TO READ A LIST OF PLACES AND SERVICES THAT YOU MIGHT HAVE HEARD OF. FOR EACH ONE, PLEASE TELL ME IF YOU HAVE EVER USED IT AND IF YOU ARE USING IT NOW. ALSO, I'D LIKE TO KNOW IF ANYONE IN HEAD START OR HOME START HELPED YOU USE IT.				
LOCAL HOSPITAL	(N=158)	(N=107)	(N= 88)	(N=353
Heard of it	96.2	72.8	100.0	96.8
Ever used it	87.4	83.1	89.8	86.7
Now using it	76.6	66.3	87.5	76.2
HM/HD Assist	10.1	2.8	5.6	6.8
FOOD STAMPS	(N=159)	(N=106)	(N= 89)	(N=354
Heard of it	100.0	100.0	100.0	100.0
Ever used it	73.6	75.5	75.3	74.6
Now using it	50.3	47.2	40.5	46.9
HM/HD Assist	6.3	1.9	4.5	4.5

(Continued)

	Home Start	Control	Head Start	Total Sample
MEDICAID	(N=159)	(N=107)	(N= 89)	(N=355)
Heard of it	93.2	91.6	94.3	92.9
Ever used it	35.3	37.4	38.1	36.6
Now using it	24.6	26.2	28.0	25.9
HM/HD Assist	2.6	1.9	3.3	2.5
FOOD COMMODITIES	(N=158)	(N=107)	(N= 89)	(N=354)
Heard of it	89.9	94.4	96.5	92.9
Ever used it	41.2	39.3	29.1	37.5
Now using it	1.3	1.9	1.1	1.4
HM/HD Assist	1.9	.0	2.2	1.4
PUBLIC HEALTH CLINIC	(N=157)	(N=109)	(N= 89)	(N=355)
Heard of it	98.8	100.0	98.9	99.2
Ever used it	84.8	69.8	77.6	82.8
Now using it	72.0	66.0	65.2	68.5
HM/HD Assist	20.4	10.1	15.7	16.1
MENTAL HEALTH CLINIC	(N=159)	(N=106)	(N= 88)	(N=353)
Heard of it	89.3	85.8	88.6	88.2
Ever used it	9.4	6.6	9.1	8.6
Now using it	6.3	2.8	2.3	4.3
HM/HD Assist	5.0	.9	1.1	2.9
FAMILY COUNSELING AGENCIES	(N=160)	(N=106)	(N= 88)	(N=354)
Heard of it	83.1	68.8	81.8	78.5
Ever used it	8.1	2.8	5.7	5.9
Now using it	2.5	.0	3.4	1.9
HM/HD Assist	1.9	.0	.0	.8
PLANNED PARENTHOOD	(N=158)	(N=107)	(N= 89)	(N=354)
Heard of it	93.1	90.6	92.1	92.0
Ever used it	48.8	41.1	39.3	44.0
Now using it	28.5	14.9	20.2	22.3
HM/HD Assist	10.1	4.7	6.7	7.6
WELFARE DEPARTMENT	(N=158)	(N=107)	(N= 89)	(N=354)
Heard of it	100.0	100.0	100.0	100.0
Ever used it	63.3	55.1	57.3	59.3
Now using it	39.9	33.6	30.3	35.6
HM/HD Assist	4.4	2.8	10.1	5.3
DAY CARE OR CHILD CARE PROGRAM	(N=156)	(N=106)	(N= 89)	(N=351)
Heard of it	96.8	96.2	97.8	96.9
Ever used it	10.9	16.0	74.2	28.5
Now using it	3.9	6.6	68.6	21.1
HM/HD Assist	3.2	5.6	56.2	17.4
RECREATIONAL PROGRAMS*	(N=158)	(N=106)	(N= 89)	(N=353)
Heard of it	77.9	72.6	75.2	75.2
Ever used it	13.3	9.4	16.8	13.0
Now using it	7.6	4.7	11.2	7.7
HM/HD Assist	5.1	.0	2.2	2.8

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*Planned program activities, rather than simply the use of Recreational Facilities like parks.

(Continued)

	Home Start	Control	Head Start	Total Sample
LEAGAL AID	(N=159)	(N=107)	(N= 89)	(N=355
Heard of it	85.6	78.5	84.3	83.2
Ever used it	16.4	14.0	21.4	17.0
Now using it	4.4	3.7	3.4	4.0
HM/HD Assist	1.3	.9	.0	.9
HOUSING AUTHORITY	(N=160)	(N=105)	(N= 89)	(N=354
Heard of it	86.1	79.1	90.9	85.3
Ever used it	25.5	18.1	29.1	24.3
Now using it	21.8	14.3	11.2	16.9
HM/HD Assist	1.2	1.0	2.2	1.4
STATE EMPLOYMENT OFFICE	(N=158)	(N=105)	(N= 87)	(N=350
Heard of it	96.7	98.2	98.7	97.7
Ever used it	51.8	53.4	68.8	56.6
Now using it	10.7	10.5	9.1	10.3
HM/HD Assist	1.2	.0	2.2	1.2
JOB TRAINING PROGRAMS	(N=160)	(N=107)	(N= 87)	(N=354
Heard of it	94.9	90.5	96.5	93.6
Ever used it	16.8	11.1	22.9	16.6
Now using it	4.3	1.8	4.6	3.6
HM/HD Assist	1.8	3.7	1.1	2.2

34. NOW I WOULD LIKE TO FIND OUT WHAT YOU THOUGHT ABOUT THE THINGS I DID WITH ____________ DURING THIS VISIT AND THE LAST ONE. TELL ME WHICH ONES YOU LIKED AND WHICH ONES YOU DIDN'T LIKE.

	Home Start	Control	Head Start	Total Sample
DDST	(N=156)	(N=106)	(N= 56)	(N=318
Liked	98.1	97.2	100.0	98.1
Disliked	1.9	2.8	.0	1.9
PSI	(N=157)	(N=106)	(N= 55)	(N=318
Liked	99.4	100.0	100.0	99.7
Disliked	.6	.0	.0	.3
HEIGHT AND WEIGHT	(N=156)	(N=106)	(N= 56)	(N=318
Liked	100.0	100.0	100.0	100.0
Disliked	.0	.0	.0	.0
8-BLOCK	(N=156)	(N=106)	(N= 74)	(N=336
Liked	94.2	91.5	97.5	94.0
Disliked	5.8	8.5	2.7	6.0

35. NOW I'D LIKE TO FIND OUT HOW YOU FEEL ABOUT THE THINGS I ASKED YOU DURING THIS VISIT AND THE LAST ONE. TELL ME WHICH THINGS YOU LIKED AND WHICH ONES YOU DIDN'T LIKE.

	Home Start	Control	Head Start	Total Sample
SCHAEFER	(N=157)	(N=107)	(N= 86)	(N=350
Liked	99.4	99.1	100.0	99.4
Disliked	.6	.9	.0	.6

(Continued)

	Home Start	Control	Head Start	Total Sample
FOOD INTAKE	(N=158)	(N=107)	(N= 86)	(N=350)
Liked	98.7	95.3	100.0	98.0
Disliked	1.3	4.7	.0	2.0
HOME ENVIRONMENT SCALE	(N=157)	(N=107)	(N= 86)	(N=350)
Liked	99.4	99.1	100.0	99.4
Disliked	.6	.9	.0	.6
PARENT INTERVIEW	(N=158)	(N=107)	(N= 86)	(N=351)
Liked	98.7	97.2	100.0	98.6
Disliked	1.3	2.8	.[illegible]	1.4

Table E-54

PARENT INTERVIEW 11B

Location of family's residence	Control (N=100)	Head Start (N= 74)	Total Sample (N=174
On a farm or in the country	30.0%	2.7%	18.4%
In a small town or in a city	70.0	97.3	81.6

Was the Home Visitor present during the Interview?	Control (N=100)	Head Start (N= 13)	Total Sample (N=113
No	55.0%	100.0%	60.2%
Yes	45.0	0	39.8

This family is in:	Control (N=101)	Head Start (N= 75)	Total Sample (N=176
Home Start	100.0%	0%	57.4%
Head Start	0	100.0	42.6

I'D LIKE TO ASK YOU SOME QUESTIONS ABOUT YOU AND YOUR FAMILY. THE FIRST QUESTIONS ARE ABOUT YOUR CHILDREN.

	Control	Head Start	Total Sample
1. WHEN DID _________ FIRST ENTER THE HEAD START/HOME START PROGRAM?	(N= 86)	(N= 48)	(N=134
Time in months	1.4	1.7	1.5
2. WAS _________ IN A HEAD START OR PRESCHOOL PROGRAM BEFORE LAST FALL?	(N=100)	(N= 75)	(N=175
No	92.0%	89.3%	90.9%
Yes	8.0	10.7	9.1
3. HAVE ANY OF _________ OLDER BROTHERS OR SISTERS BEEN IN A HEAD START PROGRAM?	(N= 97)	(N= 75)	(N=172)
No	67.0	61.3	64.5
Yes	33.0	38.7	35.5
4. HAVE ANY OF _________ OLDER BROTHERS OR SISTERS BEEN IN HOME START?	(N= 97)	(N= 75)	(N=172
No	95.9	97.3	96.5
Yes	4.1	2.7	3.5
5. WHEN WAS _________ BORN?	(N=101)	(N= 75)	(N=176
Age in months	51.4	52.8	52.0
6. I'D LIKE TO FIND OUT WHAT SHOTS _________ HAS HAD.			
HAS HE (SHE) HAD DPT SHOTS?	(N=100)	(N= 74)	(N=174
No	5.0	0	2.9
Yes	92.0	98.6	94.8
Don't Know	3.0	1.4	2.3

(Continued)

PARENT INTERVIEW 11B

(Continued)

		Control	Head Start	Total Sample
	HAS HE (SHE) HAD POLIO SHOTS	(N=100)	(N= 74)	(N=174)
	No	7.0%	1.4%	4.6%
	Yes	90.0	97.3	93.1
	Don't Know	3.0	1.4	2.3
	HAS HE (SHE) HAD MEASLES SHOTS?	(N=100)	(N= 73)	(N=173)
	No	22.0	12.3	17.9
	Yes	73.0	84.9	78.0
	Don't Know	5.0	2.7	4.0
	WHEN WAS THE LAST TIME ______ WENT TO A DOCTOR?	(N= 84)	(N= 55)	(N=139)
	Time in months	7.1	3.1	5.5
7.	WAS THIS LAST VISIT FOR A CHECK-UP, OR FOR SOMETHING WRONG?	(N= 97)	(N= 75)	(N=172)
	Check-up	44.3%	56.0%	49.4%
	Something wrong	55.7	44.0	50.6
	WHAT WAS WRONG?	(N= 54)	(N= 33)	(N= 87)
	Accidental injury	5.6	12.1	8.0
	Infection	9.3	3.0	6.9
	Other	85.2	84.8	85.1
8.	HOW IS THIS VISIT BEING PAID FOR?	(N= 95)	(N= 75)	(N=170)
	Personal Funds	37.9	20.0	30.0
	HM/HD	9.5	4.0	7.1
	Free Clinic	16.8	21.3	18.8
	ADC	1.1	8.0	4.1
	Medicaid	9.5	14.7	11.8
	Welfare	15.8	24.0	19.4
	Insurance	4.2	8.0	5.9
	EDC	5.3	0	2.9
9.	WHEN ARRANGING FOR THIS VISIT TO THE DOCTOR, OR WHEN MAKING IT, DID YOU HAVE HELP FROM ANYONE OUTSIDE YOUR FAMILY?	(N= 97)	(N= 75)	(N=172)
	No	82.5	96.0	88.4
	Yes	17.5	4.0	11.6
10.	WHO HELPED YOU?	(N= 17)	(N= 3)	(N= 20)
	Home Visitor	35.3	0	30.0
	Head Start Staff	11.8	100.0	25.0
	Other	52.9	0	45.0
11.	IS HE (SHE) FROM HEAD START OR HOME START?	(N= 17)	(N= 3)	(N= 20)
	No	52.9	0	45.0
	Yes	47.1	100.0	55.0

PARENT INTERVIEW 11B

(Continued)

		Control	Head Start	Total Sample
12.	HOW DID HE (SHE) HELP?	(N= 16)	(N= 3)	(N= 19
	Made appointment	18.8%	%	15.8%
	Transportation	31.3		26.3
	Both of above	43.8	66.7	47.4
	Gave name/phone of doctor	6.3	33.3	10.5
13.	WHEN WAS THE LAST TIME __________ WENT TO A DENTIST?	(N= 23)	(N= 24)	(N= 47
	Time in months	5.9	5.7	5.8
14.	WAS THIS LAST VISIT FOR A CHECK-UP OR FOR SOMETHING WRONG?	(N= 28)	(N= 27)	(N= 55
	Check-up	78.6%	74.1%	76.4%
	Something wrong	21.4	25.9	23.6
	WHAT WAS WRONG?	(N= 5)	(N= 7)	(N= 12
	Toothache or cavity	100.0	57.1	75.0
	Accidental injury		14.3	8.3
	Other		28.6	16.7
15.	HOW IS THIS VISIT BEING PAID FOR?	(N= 28)	(N= 27)	(N=55)
	Personal funds	21.4	18.5	20.0
	HM/HD	17.9	3.7	10.9
	Free Clinic	7.1	14.8	10.9
	ADC		3.7	1.8
	Medicaid	7.1	25.9	16.4
	Welfare	32.1	29.6	30.9
	Insurance	3.6	3.7	3.6
	EDC	10.7		5.5
16.	WHEN ARRANGING FOR THIS VISIT, OR WHEN MAKING IT, DID YOU HAVE HELP FROM ANYONE OUTSIDE YOUR FAMILY?	(N= 28)	(N= 27)	(N=55)
	No	50.0	81.5	65.5
	Yes	50.0	18.5	34.5
17.	WHO HELPED YOU?	(N= 14)	(N= 5)	(N= 19
	Home Visitor	50.0		36.8
	Head Start Staff	14.3	60.0	26.3
	Other	36.8	35.7	40.0
18.	IS HE (SHE) FROM HEAD START OR HOME START?	(N= 14)	(N= 5)	(N= 19)
	No	35.7	40.0	36.8
	Yes	64.3	60.0	63.2
19.	HOW DID HE (SHE) HELP?	(N= 13)	(N= 5)	(N= 18
	Made appointment	23.1	40.0	27.8
	Transportation		20.0	5.6
	Both of above	69.2	40.0	61.1
	Other	7.7		5.6

PARENT INTERVIEW 11B

(Continued)

20. WE'D LIKE TO FIND OUT THE MOST SERIOUS ACCIDENTS __________ HAS HAD SINCE LAST MAY. I'LL READ SOME KINDS OF ACCIDENTS AND YOU TELL ME IF ANY HAVE HAPPENED TO __________.

	Control	Head Start	Total Sample
FALLS:	(N=101)	(N= 75)	(N=176)
No accidents	86.1%	82.7%	84.7%
Treated at home	6.9	6.7	6.8
Treated by doctor/clinic/hospital	5.9	10.7	8.0
Stayed overnight at hospital	1.0		.6
BLOWS/WAS HIT:	(N=101)	(N= 75)	(N=176)
No accidents	97.0	92.0	94.9
Treated at home		2.7	1.1
Treated by doctor/clinic/hospital	3.0	5.3	4.0
CUTS:	(N=101)	(N= 75)	(N=176)
No accidents	91.1	89.3	90.3
Treated at home	5.0	5.3	5.1
Treated by doctor/clinic/hospital	4.0	5.3	4.5
ANIMAL BITES:	(N=101)	(N= 75)	(N=176)
No accidents	96.0	92.0	94.3
Treated at home	1.0	4.0	2.3
Treated by doctor/clinic/hospital	3.0	4.0	3.4
NEAR SUFFOCATION:	(N=101)	(N= 75)	(N=176)
No accidents	100.0	100.0	100.0
POISONING:	(N=101)	(N= 75)	(N=176)
No accidents	98.0	97.3	97.7
Treated at home	1.0		.6
Treated by doctor/clinic/hospital	1.0	1.3	1.1
Stayed overnight at hospital		1.3	.6
NEAR DROWNING:	(N=101)	(N= 75)	(N=176)
No accidents	99.0	100.0	99.4
Treated at home	1.0		.6
BURNS:	(N=100)	(N= 75)	(N=175)
No accidents	98.0	97.3	97.7
Treated at home	2.0	1.3	1.7
Treated by doctor/clinic/hospital		1.3	.6
ELECTRIC SHOCKS	(N=101)	(N= 75)	(N=176)
No accidents	100.0	98.7	99.4
Treated at home		1.3	.6
AUTOMOBILE ACCIDENT	(N=101)	(N= 75)	(N=176)
No accidents	99.0	98.7	98.9
Treated by doctor/clinic/hospital	1.0	1.3	1.1

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
OTHER:	(N=101)	(N= 75)	(N=176)
No accidents	100.0%	96.0%	98.3%
Treated at home		1.3	.6
Treated by doctor/clinic/hospital		2.7	1.1
OTHER:	(N=101)	(N= 75)	(N=176
No accidents	99.0	100.0	99.4
Treated by doctor/clinic/hospital	1.0		.6
21. HOW MANY BROTHERS AND SISTERS DOES __________ HAVE LIVING AT HOME?			
Total Sibs	2.7	2.5	2.6
Brothers	1.8	1.6	1.7
Sisters	1.4	1.7	1.6
22. I'D LIKE TO KNOW THEIR AGES. 0-2	1.2	1.2	1.2
3-5	1.1	1.1	1.1
6-12	2.1	1.8	1.9
13+	1.7	2.1	1.8
23. ARE YOU __________'S:	(N=101)	(N= 75)	(N=176
MOTHER?	90.1%	92.0%	90.9%
FATHER?		4.0	1.7
OLDER SISTER (OR BROTHER)?			
GRANDMOTHER, AUNT OR OTHER RELATIVE?	8.9	4.0	6.8
BABYSITTER, NEIGHBOR, OR FRIEND?	1.0		.6
24. WHEN WERE YOU BORN?	(N= 99)	(N= 75)	(N=174
Age in months	360.7	345.5	354.1
25. DO YOU HAVE A PAYING JOB?	(N=101)	(N= 75)	(N=176
No	83.2%	76.0%	80.1%
Yes	16.8	24.0	19.9
26. IS IT FULL TIME, REGULAR PART TIME, OR OCCASIONAL PART TIME?	(N= 19)	(N= 18)	(N= 37
Full time	68.4	61.1	64.9
Regular part time	21.1	27.8	24.3
Occasional part time	10.5	11.1	10.8

27. WHAT KIND OF WORK DO YOU DO? See text for occupational information.

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
28. WHAT IS THE HIGHEST GRADE YOU COMPLETED IN SCHOOL?	(N=101)	(N= 75)	(N=176)
Grade: 1	1.0%	%	.6%
5	3.0	4.0	3.4
6	4.0		2.3
7	2.0	1.3	1.7
8	11.9	2.7	8.0
9	17.8	5.3	12.5
10	18.8	17.3	18.2
11	11.9	16.0	13.6
12	24.8	41.3	31.8
13	1.0	8.0	4.0
14	2.0	4.0	2.8
15	2.0		1.1
29. DOES ANYONE (ELSE) IN YOUR FAMILY CURRENTLY EARN AN INCOME THAT IS USED TO SUPPORT THE FAMILY?	(N=101)	(N= 75)	(N=176)
No	46.5	53.3	49.4
Yes	53.5	46.7	50.6
30. WHO?	(N= 54)	(N= 35)	(N= 89)
Mother	1.9	2.9	2.2
Father/Husband	94.4	85.7	91.0
Older Sibling	1.9		1.1
Relative	1.9	2.9	2.2
Neighbor/Friend		5.7	2.2
Wife and Husband		2.9	1.1
WHO CONTRIBUTES MOST?	(N= 1)	(N= 2)	(N= 3)
Mother	100.0		33.3
Father/Husband		50.0	33.3
Neighbor/Friend		50.0	33.3
31. IS HIS (HER) JOB FULL TIME, REGULAR PART TIME, OR OCCATIONAL PART TIME?	(N= 53)	(N= 35)	(N= 88)
Full time	96.2	94.3	95.5
Regular part time	1.9	2.9	2.3
Occasional part time	1.9	2.9	2.3

32. WHAT KIND OF WORK DOES HE (SHE) DO?
See text for occupational information.

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
33. WHAT IS THE HIGHEST GRADE HE (SHE) COMPLETED IN SCHOOL?	(N= 54)	(N= 33)	(N= 87)
Grade: 1	3.7%	%	2.3%
3	5.6		3.4
4	3.7		2.3
5		3.0	1.1
6	3.7	3.0	3.4
7	5.6		3.4
8	18.5	12.1	16.1
9	7.4	3.0	5.7
10	14.8	6.1	11.5
11	3.7	12.1	6.9
12	29.6	51.5	37.9
13	1.9	3.0	2.3
15		3.0	1.1
16	1.9	3.0	2.3
34. DO YOU OWN YOUR HOME OR ARE YOU RENTING?	(N=101)	(N= 75)	(N=176)
Own	29.7	25.3	27.8
Rent	59.4	68.0	63.1
Live in home of relative	5.9	6.7	6.2
Other	5.0		2.8
35. DO YOU LIVE:	(N= 13)	(N= 66)	(N= 79)
On a farm or open country	30.8	1.5	6.3
In a small town or in a city	69.2	98.5	93.7
36. NOW I'M GOING TO READ A LIST OF COMMUNITY GROUPS AND ORGANIZATIONS. TELL ME IF YOU OR ANYONE ELSE IN YOUR FAMILY IS NOW ACTIVE IN ANY OF THEM.			
PARENT-TEACHER ASSOCIATION?	(N=101)	(N= 75)	(N=176)
No	83.2	82.7	83.0
Yes	16.8	17.3	17.0
BOY SCOUTS, GIRL SCOUTS, 4-H CLUB, OR OTHER YOUTH GROUPS?	(N=101)	(N= 75)	(N=176)
No	85.1	92.0	88.1
Yes	14.9	8.0	11.9
CHURCH ORGANIZATIONS OR SOCIAL CLUBS?	(N=101)	(N= 75)	(N=176)
No	76.2	70.7	73.9
Yes	23.8	29.3	26.1
ANY POLITICAL ORGANIZATION?	(N= 99)	(N= 75)	(N=174)
No	100.0	97.3	98.9
Yes		2.7	1.1
OTHER?	(N= 96)	(N= 74)	(N=170)
No	95.8	91.9	94.1
Yes	4.2	8.1	5.9

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
37. ARE YOU TAKING ANY COURSES OR GOING TO SCHOOL?	(N=101)	(N= 75)	(N=176)
No	92.1%	88.0%	90.3%
Yes	7.9	12.0	9.7
38. WHAT LEVEL OF EDUCATION?	(N= 8)	(N= 7)	(N= 15)
Adult Education	50.0	71.4	60.0
High School	25.0	14.3	28.0
College Courses	25.0	14.3	20.0
39. NOW I'M GOING TO READ A LIST OF PLACES AND SERVICES THAT YOU MIGHT HAVE HEARD OF. FOR EACH ONE, PLEASE TELL ME IF YOU HAVE EVER USED IT AND IF YOU ARE USING IT NOW. ALSO, I'D LIKE TO KNOW IF ANYONE IN HEAD START OR HOME START HELPED YOU USE IT.			
LOCAL HOSPITAL	(N= 99)	(N= 73)	(N=172)
Heard of it	81.8	93.2	86.5
Ever used it	72.7	93.2	81.3
Now using it	63.6	64.4	63.9
HM/HD Assist	4.0	1.4	2.9
FOOD STAMPS	(N=100)	(N= 74)	(N=174)
Heard of it	99.0	100.0	99.4
Ever used it	63.0	62.2	62.6
Now using it	48.0	52.8	50.0
HM/HD Assist	1.0	1.4	1.1
MEDICAID	(N=100)	(N= 74)	(N=174)
Heard of it	85.0	97.4	90.2
Ever used it	32.0	63.6	45.4
Now using it	27.0	52.8	37.9
HM/HD Assist	1.0	1.4	1.1
FOOD COMMODITIES	(N= 98)	(N= 74)	(N=172)
Heard of it	71.4	70.3	70.9
Ever used it	22.4	35.2	27.9
Now using it	0	0	0
HM/HD Assist	1.4		.6
PUBLIC HEALTH CLINIC	(N=100)	(N=73)	(N=173)
Heard of it	97.0	100.0	98.3
Ever used it	73.0	82.2	76.9
Now using it	57.0	67.1	61.3
HM/HD Assist	8.0	9.6	8.7
MENTAL HEALTH CLINIC	(N=100)	(N= 75)	(N=175)
Heard of it	76.0	73.3	74.8
Ever used it	10.0	16.0	12.5
Now using it	4.0	6.7	5.1
HM/HD Assist	0	0	0

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
FAMILY COUNSELING AGENCIES	(N=100)	(N= 75)	(N=175)
Heard of it	63.0%	81.3%	70.8%
Ever used it	6.0	9.3	7.4
Now using it	2.0	1.3	1.7
HM/HD Assist		1.3	.6
PLANNED PARENTHOOD	(N=100)	(N= 75)	(N=175)
Heard of it	85.0	96.0	89.7
Ever used it	33.0	41.3	36.6
Now using it	23.0	21.3	22.3
HM/HD Assist	1.0		.6
WELFARE DEPARTMENT	(N= 99)	(N= 75)	(N=174)
Heard of it	99.0	100.0	99.3
Ever used it	60.6	82.7	70.0
Now using it	42.4	56.0	48.2
HM/HD Assist	1.0	1.3	1.1
DAY CARE OR CHILD CARE PROGRAM	(N=101)	(N= 74)	(N=175)
Heard of it	92.1	93.3	92.7
Ever used it	12.9	16.3	14.4
Now using it	1.0	5.5	2.9
HM/HD Assist	1.0	1.4	1.2
RECREATIONAL PROGRAMS	(N= 98)	(N= 74)	(N=172)
Heard of it	67.4	81.1	73.2
Ever used it	9.2	29.7	18.0
Now using it	4.1	16.2	9.3
HM/HD Assist	1.0		.6
LEGAL AID	(N=101)	(N= 74)	(N=175)
Heard of it	73.3	97.4	83.5
Ever used it	18.8	32.5	24.6
Now using it	1.0	4.1	2.3
HM/HD Assist	0	0	0
HOUSING AUTHORITY	(N=101)	(N= 75)	(N=176)
Heard of it	69.4	89.3	77.9
Ever used it	24.8	37.3	30.2
Now using it	20.8	22.7	21.6
HM/HD Assist	0	1.3	.6
STATE EMPLOYMENT OFFICE	(N=100)	(N= 73)	(N=173)
Heard of it	94.0	95.9	94.8
Ever used it	32.0	52.1	40.5
Now using it	7.0	8.2	7.5
HM/HD Assist	0	1.4	.6
JOB TRAINING PROGRAMS	(N=100)	(N= 75)	(N=175)
Heard of it	89.0	94.7	91.5
Ever used it	18.0	34.7	25.2
Now using it	1.0	6.7	3.5
HM/HD Assist	1.0	0	.6

PARENT INTERVIEW 11B

(Continued)

	Control	Head Start	Total Sample
40. NOW I WOULD LIKE TO FIND OUT WHAT YOU THOUGHT ABOUT THE THINGS I DID WITH __________ DURING THIS VISIT AND THE LAST ONE. TELL ME WHICH ONES YOU LIKED AND WHICH ONES YOU DIDN'T LIKE.			
DDST	(N= 99)	(N= 60)	(N=159)
Liked	98.0%	98.3%	98.1%
Disliked	2.0	1.7	1.9
PSI	(N=100)	(N= 60)	(N=160)
Liked	99.0	100.0	99.4
Disliked	1.0	0	.6
HEIGHT & WEIGHT	(N= 98)	(N= 59)	(N=157)
Liked	100.0	100.0	100.0
Disliked	0	0	0
8-BLOCK	(N= 99)	(N= 71)	(N=170)
Liked	98.0	94.4	96.5
Disliked	2.0	5.6	3.5
41. NOW I'D LIKE TO FIND OUT HOW YOU FEEL ABOUT THE THINGS I ASKED DURING THIS VISIT AND THE LAST ONE. TELL ME WHICH THINGS YOU LIKED AND WHICH ONES YOU DIDN'T LIKE.			
SCHAEFER	(N=100)	(N= 72)	(N=172)
Liked	99.0	98.6	98.8
Disliked	1.0	1.4	1.2
FOOD INTAKE	(N=100)	(N= 72)	(N=172)
Liked	97.0	100.0	98.3
Disliked	3.0	0	1.7
HOME ENVIRONMENT SCALE	(N=100)	(N= 72)	(N=172)
Liked	99.0	100.0	99.4
Disliked	1.0	0	.6
PARENT INTERVIEW	(N=100)	(N= 74)	(N=174)
Liked	98.0	100.0	98.9
Disliked	2.0	0	1.1

8-Block Sort Task: Mother Interaction Variables

The mother interaction variables used in this report were developed during the analysis of the spring 1974 data and are described in detail in Interim Report V. Reliabilities of the individual categories are presented in Table E-55 and reliabilities for the scale scores are presented in Table E-56. Table E-57 presents the fall 1973/fall 1974 correlations. The fall/spring and fall/fall correlations were very similar for the control group but there were some changes for Home Start and Head Start. For Home Start there were two variables, Diagnostic and Mean Length of String, for which there were decreases in the correlations; from .38 and .39 for fall/spring to .13 and .12 for fall/fall. For Head Start there was a decrease in one variable, Request Talking; from .16 for fall/spring to -.03 for fall/fall.

Table E-58 presents the changes in the means for the interaction variables. The results of these analyses were very similar to the fall/spring analyses. For all groups the mothers do significantly less talking and the children do significantly more talking. The Home Start mothers had a significant increase in the number of times they request the child to talk and the Head Start mothers had a significant increase in the number of interactions per minute. Both Home Start and Head Start mothers had a significant decrease in the Mean Length of String variable. This variable is a measure of teaching style therefore a decrease in this variable indicates an increase in the number of interactions between mother and child.

Table E-55

RELIABILITY OF CODING 8-BLOCK AUDIO TAPES (INDIVIDUAL CATEGORIES)

-Block Categories	Number of Events Coded Coder 1	Coder 2	Coder 3	Coder 4	Pairwise Reliabilities (Cartwright's Alpha) Mean	Minimum	Maximum
MOTHER CATEGORIES							
equest Talking							
. Height	6	5	6	5	.75	.57	1.00
. Mark	8	11	8	8	.38*	.27	.78
. Height & Mark	6	3	6	7	.40*	.11	.71
. Unclassified	85	78	90	73	.60	.52	.68
equest Understanding							
. Height	30	37	35	35	.58	.53	.68
. Mark	75	68	70	69	.66	.59	.75
. Height & Mark	64	62	61	56	.68	.60	.76
. Unclassified	185	181	172	180	.54	.47	.58
equest Placement							
. Height	28	30	27	29	.62	.48	.78
0. Mark	38	37	41	37	.71	.64	.77
1. Height & Mark	52	46	55	58	.71	.60	.80
2. Unclassified	186	164	191	190	.69	.61	.75
alk About							
3. Height	40	36	29	32	.48*	.39	.56
4. Mark	69	67	72	78	.64	.60	.68
5. Height & Mark	54	58	59	62	.62	.52	.72
6. Unclassified	93	80	64	81	.38*	.32	.48
7. Direct Request	100	98	109	112	.55	.46	.67
8. Comment	11	4	8	20	.15*	.04	.24
9. Task Irrelevancy	6	0	5	3	.28*	.00	.60
0. Praise/Acknowledge	78	109	91	109	.52	.48	.57
1. Encourage	6	6	5	3	.55	.29	.83
2. Bribe/Threaten/Demean	0	0	1	1	.17*	.00	1.00
3. Correction/Alone	124	104	117	115	.64	.54	.74
CHILD CATEGORIES							
alk About							
4. Height	74	63	66	72	.62	.59	.65
5. Mark	120	100	110	111	.57	.49	.69
6. Height & Mark	19	27	30	25	.44*	.26	.72
7. Unclassified	302	200	255	256	.51	.46	.59
8. Comments	9	8	16	3	.07*	.00	.19
9. Task Irrelevancy	5	0	4	2	.28*	.00	.80
. Refuse, Reject	2	2	2	4	.75	.50	1.00

eliability considered too low for using this category as an individual item.

Table E-56

RELIABILITY OF CODING 8-BLOCK AUDIO TAPES
(SCALE SCORES)

	Number of Events Coded				Pairwise Reliabilities (Cartwright's Alpha)			
					Fall, 1974			Fall, 1973
Score[1]	Coder 1	Coder 2	Coder 3	Coder 4	Mean	Minimum	Maximum	Mean
1. Request Talk (1-3)	20	19	20	20	.48	.35	.60	—
2. Talk About (13-15)	163	161	160	172	.63	.57	.71	.65
3. Feedback (20,21,23)	208	219	213	227	.59	.53	.63	.52
4. Child Talk (24-26)	213	190	206	208	.62	.56	.73	.73

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[1] Number in parentheses indicate items belonging to each scale in the fall, 1974 analysis.

INSTRUMENT RELIABILITY

Table E-57 presents the reliabilities for 17 of the scales that have been described in this appendix. For each measure the reliabilities were calculated separately for the six-site and for the four-site samples. The data include the test-retest correlations (fall-to-fall) and the internal consistency alpha coefficients that apply to the fall 1973 and fall 1974 data. On most measures the alpha coefficients have remained relatively constant; exceptions are the DDST Gross Motor scale in the four-site sample, which decreased, and the SBI E-I scale, whose internal consistency increased somewhat.

Table E-57

8-BLOCK INTERACTION SCORES
FALL 1973-FALL 1974 CORRELATIONS

Variable	Home Start N	Home Start r	Control N	Control r	Head Start N	Head Start r	Total Sample N	Total Sample r
Request Talk	131	.41	79	.40	71	-.03	281	.34
Diagnostic	131	.13	79	.27	71	.41	281	.23
Talk About	131	.13	79	.37	71	.61	281	.30
Feedback	131	.27	79	.30	71	.25	281	.27
Child Talk	131	.35	79	.33	71	.24	281	.32
Interactions/Min.	131	.30	79	.40	71	.27	281	.33
Mean Length of String	134	.12	82	.06	72	.21	288	.12

Table E-58

8-BLOCK TASK
FALL 1973-FALL 1974 CHANGE IN MOTHER INTERACTION VARIABLES

	Six-Site Analysis				Four-Site Analysis			
	Home Start		Control		Home Start		Head Start	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Request Talk								
Fall '73	.52	.83	.66	.87	.61	.91	.57	.67
Fall '74	.69	.86	.75	.91	.72	.84	.60	.58
Difference	.17	.92	.08	.97	.11	.89	.03	.90
t ratio	2.11*		.75		1.18		.33	
N	131		79		91		71	
Diagnostic								
Fall '73	.88	1.14	1.03	1.19	.96	1.26	.86	.91
Fall '74	1.08	1.11	1.18	1.33	1.14	1.16	1.12	1.12
Difference	.19	1.49	.15	1.40	.18	1.61	.27	1.12
t ratio	1.50		.95		1.08		2.01*	
N	131		79		91		71	
Talk About								
Fall '73	1.84	1.98	1.64	1.53	1.67	1.89	1.86	1.48
Fall '74	1.34	1.26	1.28	1.13	1.14	.98	1.44	1.46
Difference	-.50	2.21	-.36	1.52	-.52	2.03	-.41	1.28
t ratio	-2.61*		-2.10*		-2.46*		-2.71*	
N	131		79		91		71	
Feedback								
Fall '73	1.65	1.76	1.47	.99	1.57	1.95	1.41	.98
Fall '74	1.52	1.25	1.35	1.14	1.38	1.22	1.31	1.21
Difference	-.12	1.87	-.12	1.27	-.19	2.02	-.10	1.35
t ratio	-.76		-.87		-.89		-.62	
N	131		79		91		71	
Child Talk								
Fall '73	1.53	1.87	1.75	2.16	1.56	1.55	1.49	1.49
Fall '74	3.02	2.66	2.71	2.21	3.32	2.74	2.57	2.02
Difference	1.49	2.66	.96	2.52	1.76	2.46	1.08	2.21
t ratio	6.42*		3.37*		6.82*		4.10*	
N	131		79		91		71	

*p<.05

Table E-58

8-BLOCK TASK
FALL 1973-FALL 1974 CHANGE IN MOTHER INTERACTION VARIABLES

(continued)

	Six-Site Analysis				Four-Site Analysis			
	Home Start		Control		Home Start		Head Start	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Interaction/ Minute								
Fall '73	8.58	6.15	7.90	5.43	8.54	5.78	6.16	4.09
Fall '74	8.66	5.14	8.74	4.44	8.84	5.03	7.44	4.14
Difference	.08	6.72	-.84	5.49	.30	6.48	1.28	4.98
t ratio	.13		-1.37		.44		2.15*	
N	131		79		91		71	
Mean Length of String								
Fall '73	5.61	9.46	5.00	6.94	4.70	3.84	8.06	9.37
Fall '74	3.61	3.10	4.23	4.14	3.39	3.22	3.97	2.78
Difference	-2.00	9.58	-.77	7.88	-1.31	4.10	-4.09	9.19
t ratio	-2.42*		-.89		-3.08*		-3.78*	
N	134		82		93		72	

*p<.05

Table E-59

INSTRUMENT RELIABILITY BY GROUP FOR SIX-SITE AND FOUR-SITE SAMPLES

Instrument or Scale	Reliability	Six-Site Sample		Four-Site Sample	
		Home Start	Control Group	Home Start	Head Start
PSI	Test-retest	.66	.76	.62	.66
	Alpha-fall 1973	.81	.66	.83	.71
	Alpha-fall 1974	.85	.81	.84	.77
	(N)	(119)	(77)	(84)	(74)
DDST: Language	Test-retest	.68	.73	.68	.60
	Alpha-fall 1973	.85	.81	.85	.77
	Alpha-fall 1974	.84	.82	.82	.74
	(N)	(137)	(95)	(97)	(78)
DDST: Fine Motor	Test-retest	.66	.61	.68	.53
	Alpha-fall 1973	.79	.65	.79	.64
	Alpha-fall 1974	.71	.71	.69	.55
	(N)	(155)	(106)	(108)	(88)
DDST: Gross Motor	Test-retest	.56	.59	.52	.38
	Alpha-fall 1973	.63	.50	.63	.62
	Alpha-fall 1974	.53	.54	.47	.43
	(N)	(126)	(86)	(90)	(72)
DDST: Personal-Social	Test-retest	.39	.40	.44	.55
	Alpha-fall 1973	.47	.48	.45	.57
	Alpha-fall 1974	.51	.37	.51	.54
	(N)	(154)	(106)	(106)	(82)
HES: Playthings	Test-retest	.39	.36	.45	.49
	Alpha-fall 1973	.54	.52	.55	.46
	Alpha-fall 1974	.63	.58	.66	.49
	(N)	(159)	(109)	(110)	(87)
HES: Mother Teaches	Test-retest	.31	.48	.26	.44
	Alpha-fall 1973	.72	.75	.71	.59
	Alpha-fall 1974	.70	.68	.71	.61
	(N)	(159)	(109)	(110)	(88)
HES: Household Tasks	Test-retest	.50	.50	.51	.58
	Alpha-fall 1973	.39	.44	.37	.37
	Alpha-fall 1974	.52	.40	.56	.49
	(N)	(157)	(108)	(108)	(87)
HES: Mother Involved	Test-retest	.41	.44	.44	.48
	Alpha-fall 1973	.54	.65	.56	.35
	Alpha-fall 1974	.55	.61	.50	.55
	(N)	(156)	(102)	(109)	(86)

(continued)

Table E-59

INSTRUMENT RELIABILITY BY GROUP FOR SIX-SITE AND FOUR-SITE SAMPLES

(continued)

Instrument or Scale	Reliability	Six-Site Sample		Four-Site Sample	
		Home Start	Control Group	Home Start	Head Start
HES: Books	Test-retest	.45	.48	.48	.59
	Alpha-fall 1973	.45	.48	.50	.49
	Alpha-fall 1974	.51	.40	.56	.23
	(N)	(159)	(110)	(110)	(88)
MBOS: Punitive	Test-retest	.29	-.02	.33	.33
	Alpha-fall 1973	.72	.64	.63	.84
	Alpha-fall 1974	.69	.57	.63	.51
	(N)	(144)	(109)	(102)	(62)
MBOS: Supportive	Test-retest	.13	.11	.12	.03
	Alpha-fall 1973	.64	.65	.59	.71
	Alpha-fall 1974	.61	.63	.58	.78
	(N)	(136)	(107)	(97)	(61)
SBI: Task Orientation	Test-retest	.46	.38	.42	.51
	Alpha-fall 1973	.56	.61	.56	.61
	Alpha-fall 1974	.72	.68	.71	.66
	(N)	(159)	(109)	(111)	(85)
SBI: Extraversion-Introversion	Test-retest	.48	.44	.49	.24
	Alpha-fall 1973	.60	.72	.58	.55
	Alpha-fall 1974	.73	.66	.71	.73
	(N)	(158)	(109)	(110)	(86)
SBI: Hostility-Tolerance	Test-retest	.59	.62	.67	.62
	Alpha-fall 1973	.67	.69	.70	.63
	Alpha-fall 1974	.75	.75	.79	.71
	(N)	(157)	(109)	(109)	(85)
POCL: Test Orientation	Test-retest	.49	.40	.55	.39
	Alpha-fall 1973	.93	.92	.92	.91
	Alpha-fall 1974	.94	.94	.94	.92
	(N)	(155)	(107)	(106)	(86)
POCL: Sociability	Test-retest	.43	.54	.44	.45
	Alpha-fall 1973	.92	.87	.92	.91
	Alpha-fall 1974	.87	.93	.88	.88
	(N)	(158)	(106)	(109)	(86)

APPENDIX F

SUMMATIVE WHOLE SCORE ANALYSIS

APPENDIX F

RELATIONSHIPS AMONG MEASURES

Robert Hanvey

This appendix summarizes the results of the factor analyses and intercorrelations of the various scales and measures of the Home Start evaluation. The purpose of the factor analyses for this report was to determine whether or not the relationships presented in previous reports were maintained after the third administration of the test battery. Interim Report IV used a set of 28 whole scores. Interim Report V and this report used 35 scores. The additional seven scores were scale scores developed from the audio portion of the mother-child interactions of the 8-Block Sort Task (see Table F-1). The intercorrelations of the 35 scores for each of the three groups are presented in Tables F-2 to F-4. The rotated factor loadings for both the principle components and the image analysis are presented for each of the three groups in Tables F-5 to F-7.

Factor Analyses

As had been done previously, two factor analyses were completed for each of the three groups: A principle components analysis with unities in the diagonals and an image analysis with squared multiple correlations initially in the diagonals. The purpose of the principle components analysis was to describe empirically all major dimensions of the project variables. The image analysis served to describe the common variance.

Although there appears to be general consistency in the patterns of factor loadings for the major variables across the three groups, the discrepancies are difficult to interpret. Some of the inconsistencies are likely to be due to the fairly small sample size remaining after 18 months of the project. Subject-to-variable ratios vary from less than 2:1 for the Head Start group to just over 4:1 for the Home Start group. The differences in the number of factors with eigenvalues greater than 1.0 and in the percent of variance accounted for can be summarized as follows:

Sample	Principal Components			Image Analysis	
	Number of Factors	Percent of Variance Accounted For	Percent of Variance Common	Number of Factors	Percent of Variance Accounted For
Home Start	9	62.7	52.7	4	65.0
Control	11	70.4	63.9	6	68.1
Head Start	12	73.6	64.7	7	69.3

Without resorting to factor matching procedures, it is difficult to assess the nature of the differences in solutions derived from the three different samples. There are, however, several interesting consistencies, both across time points and across groups.

The cognitive factor still emerges as the factor which accounts for the greatest amount of variance for all three groups. The mother teaching and interaction variables from the 8-Block account for about 10% of the variance in all three groups. As expected, food and nutrition loaded on the same factor for all three groups as did height and weight. As in prior reports the Home Environment variables loaded together in a factor accounting for about 10% of the variance for Home Start. This pattern was broken for the control group and Head Start, however, with Home Environment variables loading either singly or in pairs on different factors.

For the image analysis the cognitive factor again accounts for the greatest amount of variance for all three groups. The mother teaching and interaction variables load together on the second factor accounting for about 8% of the variance in all three groups. The Home Environment variables load together on the third factor for Home Start and control but the picture is less clear for Head Start with the variables being split into different factors.

Summary

The factor analyses both across time and across the three groups seem to display a reasonable degree of consistency even with the somewhat reduced sample sizes. It still appears, as reported in Interim Reports IV and V that the factor analyses of the whole scores can be best described as "method" solutions.

Table F-1

KEY TO WHOLE SCORE FACTOR ANALYSIS AND INTERCORRELATIONS

Variable	Whole Score
1	Sex
2	Age in months
3	Occupation
4	Mother's Education
5	Urban/Rural
6	DDST - Fine Motor
7	DDST - Language
8	DDST - Gross Motor
9	DDST - Personal-Social
10	8-Block Child Score
11	PSI
12	SBI - Task Orientation
13	SBI - Extraversion-Introversion
14	SBI - Hostility-Tolerance
15	POCL - Test Orientation
16	POCL - Sociability
17	Food Total
18	Nutrition Total
19	Height
20	Weight
21	HES - Mother Involved
22	HES - Playthings
23	HES - Mother Teaches
24	HES - Household Tasks
25	HES - Books
26	HES - TV
27	MBOS - Supportive
28	MBOS - Punitive
29	8-Block - Talk About
30	8-Block - Feedback
31	8-Block - Child Talk
32	8-Block - Diagnostic
33	8-Block - Request Talk
34	8-Block - Interactions/Minute
35	8-Block - Mean Length of Mother String

TABLE F-2

WHOLE SCORE INTERCORRELATIONS--HOME START

(NS RANGE FROM 146 TO 160)

```
               |SEX AGE OC ED UR     DDST     8B PSI    SBI   PCCL  FCOD  H  W           HES          MBCS        8-BLOCK
|      SCORE   |  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34
|              |-----------------------------------------------------------------------------------------------------------
| AGE       2  | -7
| OCC       3  |  0  9
| ED        4  |  7 -4 23
| U/R       5  |  4-32 -5 25
|           6  | 16 45 24  1-23
| DDST      7  | 15 54 20  0-39 69
|           8  | 12 40 26 10-15 49 41
|           9  | 12 20 13  5  0 31 35 18
| 8-B      10  |  5 40 19 10-13 46 54 35 34
| PSI      11  | 11 43 30  8-26 65 77 53 34 59
|          12  | -3 21  0-11-37 11 25 23 12 13 27
| SBI      13  |  8  5  0  0-10 12 22  9 24  4 21 35
|          14  |  6 -9-17-13  2-20-23-17-23-24-31-19-19
| POCL     15  | 14 26 15 13 -9 47 54 36 31 35 52 29 21-24
|          16  |  5 15 20 21  0 25 34 17 27 40 43  0 20-15 53
| FOOD     17  | -5 14 -4  2 -9  9  7  9  4  1  5 27 11  8  3 -2
| NUT      18  |-17 13  3 15 -2 12  8 12  6 11 12  4-11 -4  6 16 59
| HT       19  | -7 56 22  6-15 33 44 36 13 31 45 12  4-19 24 22 13 14
| WT       20  | -1 30  6  0 -7 17 29 19  0 15 30  9 11 -6 11 11 17  9 69
|          21  |  4 -1  0  5 -9  8  9  2 24  5 14 39 35-24 14  4 27  7 -1 -2
|          22  | -6 -3 18 22 -5 10 17  4 26 14 27 10 26-22 16 23 10 11  9  7 25
| HES      23  | 10  0 17  8 -5 21 16 17 21  7 24 23 14-12  9  9 15  1  7  4 38 38
|          24  | 18  7  9 11-10 17 29  3 28 25 22 25 21-18 13  3 16 10 -2-14 47 36 33
|          25  | -6  4  5 15-17 19 30 13 28 19 38 31 34-28 23 14 14  8  7  7 49 52 33 41
|          26  | 25  2 -4-10  0  4  1  0-13 -8 -4 -8-11  5 -9-15-11 -9 -4 -4 -7-20-14  1-21
| MBOS     27  | -6-16  6 12 -5 -1 -4 -4  9  9  9 22 -3-13 16  0 -9-14 -7 -6 23 28 25 25 28-17
|          28  |-14-15-23  3 -1-39-39-28-15-28-36-11-11 16-47-24  0 -4-18-13  0 -1 -6 -8 -9  1  7
|          29  |  5-17 -2 17 20-18-25  0 -6-15-18  0-11 -7  4  2 -6-10 -6 -2  5  1  0-13 -5  3 10  0
|          30  |-13-26-13  4 14-25-24-28-24-21-23 -2 -7 11-16-14 -5  0-16 -3  3 -3  1  1 -7 -4  4 16 25
|          31  |  8 22 15 15 -8 26 27 32 14 46 32 24  4-13 30 27  9  9 25 13 10 17 11  6 10  1  5-26 19  7
| 8-B      32  |  7  3 13 17 -1 24 22 20 -4 35 27  9 -3-14 18  6 -6  0  8  3  1 16 -2  8 12 11  7-12  9  8 65
|          33  | -2  4  0 15  9  0 -1 15  0  2  2  8  3  0 10  2 17  7  7  2 10 12 12 -4  7 -2  8-12  9 10 52 34
|          34  | -1  0  5 19  8  4  1  3  4 24 19 11  5 -6  6 24  2  8  6  4 11 21 11  9 13 -2  6 -6 26 44 72 49 44
|          35  |  4-18-19 -5  5-26-32-17-12-38-38-12-11  8-22-37-11-18-16-13-12-24-20 -9-19  5 -3 19 -4 -5-46-25-16-57
```

TABLE F-3

WHOLE SCORE INTERCORRELATIONS--CONTROL GROUP

(NS RANGE FROM 94 TO 110)

	SCORE	SEX 1	AGE 2	OC 3	ED 4	UR 5	6	DDST 7	8	9	88 10	PSI 11	12	SBI 13	14	POCL 15	16	FCOD 17	18	H 19	W 20	21	22	HES 23	24	25	26	MBCS 27	28	29	30	8-BLCCK 31	32	33	34
AGE	2	-4																																	
OCC	3	-17	9																																
ED	4	3	-2	16																															
U/R	5	15	-17	-15	-2																														
	6	16	43	15	27	-24																													
DDST	7	2	40	20	23	-27	67																												
	8	7	30	-5	17	-15	44	45																											
	9	-3	28	9	7	-17	48	34	26																										
8-8	10	0	26	15	33	-2	48	47	35	28																									
PSI	11	-1	43	24	29	-20	68	70	39	46	46																								
	12	5	10	8	11	-21	28	17	17	36	16	32																							
SBI	13	12	-8	-12	12	5	-2	-12	-5	6	5	0	22																						
	14	3	-4	0	-11	23	-17	-10	-13	-17	-14	-26	-20	-8																					
POCL	15	14	23	5	15	-15	35	40	34	27	30	44	26	29	-19																				
	16	20	21	8	17	-5	35	43	13	12	35	44	18	32	-20	65																			
FOOD	17	-20	14	-14	3	-3	5	5	4	24	21	9	2	3	-5	16	15																		
NUT	18	-16	8	-7	7	-11	8	4	0	23	23	7	10	5	-17	21	9	72																	
HT	19	-11	52	6	14	-12	36	33	31	30	21	44	10	13	0	35	19	12	6																
WT	20	-14	42	7	11	-11	17	20	19	15	28	42	10	3	-9	19	21	28	17	66															
	21	11	-7	1	21	-11	7	0	-1	0	17	-2	18	18	-12	-6	6	15	4	-11	-9														
	22	-1	-9	16	34	-15	26	25	8	16	22	32	43	19	-9	12	14	0	8	5	8	31													
HES	23	17	16	1	7	-6	13	11	2	15	-11	13	22	7	9	8	13	7	0	3	-3	21	25												
	24	24	-2	-6	9	-6	7	-6	-2	11	8	4	28	25	3	14	4	14	7	14	3	45	21	38											
	25	6	-18	4	26	-16	10	3	7	9	13	18	37	26	-23	20	17	18	10	0	9	51	54	17	46										
	26	-7	-18	-12	-13	0	-13	-1	-12	-20	-8	-20	-20	-14	5	-26	-22	-4	-1	-24	-13	-20	-6	-23	-17	-17									
MBOS	27	3	0	9	8	-5	11	16	8	7	26	20	12	3	-6	21	10	-3	6	2	0	12	7	-16	0	3	11								
	28	-15	-17	0	-11	12	-29	-22	-11	-6	-4	-10	-14	-4	0	-28	-6	7	3	-18	-11	9	-9	4	-14	-1	2	9							
	29	15	0	5	9	6	-26	-24	-19	-23	-12	-21	-2	26	-1	15	13	-5	4	-12	-11	23	-8	-11	16	22	-8	4	-2						
	30	2	-14	-2	-18	15	-22	-36	-23	-30	1	-15	-27	-10	4	-26	-4	-9	-16	-27	-8	10	-8	-14	-8	-9	1	4	32	15					
	31	7	9	10	44	10	18	16	18	-2	52	14	0	17	-10	27	28	15	15	0	0	11	9	-1	12	8	-15	20	3	22	0				
8-B	32	9	-8	-2	36	12	26	7	19	-8	30	7	-6	5	-10	9	1	19	21	-7	-8	6	9	-16	6	-4	0	32	7	0	9	64			
	33	-10	-6	0	23	9	-5	0	-3	-8	5	-8	-18	8	-2	4	0	13	14	-6	-10	16	8	-6	4	5	0	9	-5	23	-1	55	38		
	34	0	9	7	25	12	5	5	0	-18	37	5	-10	13	-8	17	32	9	10	-7	0	10	5	-15	2	5	-19	10	-2	29	26	77	49	48	
	35	3	-12	-7	-21	6	-16	-12	-20	2	-35	-21	-8	-14	17	-25	-42	-14	-12	0	-3	6	-10	-4	6	-3	14	1	0	-16	-2	-54	-28	-28	-66

TABLE F-4

WHOLE SCORE INTERCORRELATIONS--HEAD START

(NS RANGE FROM 68 TO 89)

		SEX	AGE	OC	ED	UR		DDST			88	PSI		SBI		POCL		FOOD		H	W			HES				MBCS				8-BLOCK			
	SCORE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
AGE	2	1																																	
OCC	3	-3	-4																																
ED	4	-32	-7	42																															
U/R	5	-9	-1	12	17																														
	6	5	29	28	17	-1																													
DDST	7	-19	12	17	29	-3	55																												
	8	14	34	31	19	3	51	33																											
	9	5	4	13	20	-8	45	24	23																										
8-B	10	-26	0	9	30	-7	30	42	12	20																									
PSI	11	-18	16	24	36	-3	53	70	35	32	51																								
	12	-7	11	-9	2	1	16	26	18	23	14	19																							
SBI	13	5	13	-7	-3	-19	14	22	6	0	3	16	31																						
	14	13	-3	-18	-25	-9	-27	-24	-9	-36	-22	-32	-9	-18																					
POCL	15	-14	8	6	21	-15	46	50	37	13	29	45	18	20	-6																				
	16	-15	12	13	25	-8	26	38	32	9	31	42	3	23	-16	46																			
FOOD	17	-4	4	2	12	3	1	-5	11	-3	-4	-16	3	-7	8	-12	-1																		
NUT	18	-4	2	3	13	8	0	2	12	8	9	2	-4	-4	-8	-5	6	73																	
HT	19	0	53	9	1	19	11	-11	25	-8	-8	-9	-3	-8	3	-9	-7	16	7																
WT	20	11	30	5	1	6	6	-3	12	1	-3	-3	-4	-3	4	-6	2	12	11	66															
	21	19	3	4	-6	-22	30	2	8	7	3	5	11	22	2	21	23	14	0	-9	-2														
	22	0	-4	20	17	-7	33	25	0	9	11	14	13	-3	2	8	5	38	16	-2	4	35													
HES	23	21	7	6	-15	0	29	25	19	6	-12	12	28	21	6	20	12	-5	-6	10	11	39	14												
	24	7	32	7	20	15	35	10	17	26	7	4	12	-15	-2	21	15	24	5	31	20	22	35	16											
	25	-3	-10	2	21	0	8	2	-23	11	1	4	21	14	-7	-3	4	33	25	-17	-8	36	47	0	15										
	26	4	18	-12	-12	-2	3	2	10	-14	-2	6	16	9	5	-8	-12	-8	-13	9	-5	8	-3	1	-2	-1									
MBOS	27	-17	-14	9	17	-4	-7	15	-13	-16	40	21	0	3	4	4	13	-23	-18	-17	-17	4	6	12	-2	-2	12								
	28	13	2	3	1	-4	-22	-14	-11	-16	-29	-15	-7	3	8	-39	-10	-15	-23	17	14	-13	-8	-2	-24	-11	13	0							
	29	-22	10	19	14	-9	4	8	3	-1	25	12	3	-5	10	16	23	8	10	-7	-12	-5	-8	-20	7	-6	-5	-3	-31						
	30	-20	-8	9	11	-6	-20	-10	-13	-16	26	-4	-3	2	1	-3	16	2	13	-19	-12	-7	-6	-16	-6	-11	-12	47	1	46					
	31	-7	8	15	-2	2	32	19	32	17	46	30	-6	-4	-5	23	24	-11	-5	4	2	17	-1	6	2	-26	-6	18	-12	20	15				
8-B	32	-3	0	11	-2	1	25	21	24	19	21	27	17	-1	-8	18	8	-7	-6	-6	-12	13	-2	12	7	-23	7	3	-3	8	-2	57			
	33	6	-4	29	2	6	14	-4	9	-2	5	4	-21	-11	1	0	-4	9	8	-1	-12	4	8	-3	4	-4	-3	-1	1	18	14	37	36		
	34	-18	-6	15	7	6	19	20	17	20	38	21	1	-8	-20	19	25	-3	4	-2	-8	4	0	0	6	-18	-20	35	-14	29	37	79	40	37	
	35	9	-1	-11	-9	-9	-20	-18	-20	-17	-32	-22	2	2	19	-6	-30	-5	-15	-14	-7	-11	0	-6	-8	7	2	-17	-5	9	4	-58	-34	-27	-63

ROTATED FACTOR LOADINGS, HOME START

	PRINCIPAL COMPONENTS ANALYSIS (UNITIES IN DIAGONALS) (NS RANGE FROM 146 TO 160)										IMAGE ANALYSIS (SMC IN DIAGONALS) (NS RANGE FROM 146 TO 160)					
SCORE	I	II	III	IV	V	VI	VII	VIII	IX	H	I	II	III	IV	H	SMC
1	17	10	-04	-11	76	-10	-09	-14	-10	68.0	18	00	02	-26	10.2	34.5
2	54	-07	05	18	-03	24	43	08	14	60.3	56	-08	-07	37	46.5	58.6
3	39	12	04	-08	-09	-40	08	17	03	38.7	31	07	08	-04	10.5	29.7
4	07	20	14	08	-04	-68	02	05	-15	55.8	05	26	13	-06	09.0	32.7
5	-29	-14	01	01	14	-60	-10	-24	-19	59.3	-27	16	-13	-22	16.3	43.1
6	75	12	09	06	16	04	11	-03	15	64.7	71	00	11	07	52.7	63.8
7	75	20	10	-01	08	18	24	-14	25	79.7	82	-08	19	12	72.3	82.0
8	67	04	07	12	08	-03	19	15	-25	59.8	58	04	04	13	35.2	51.4
9	39	36	-08	01	02	-11	-07	-33	08	42.2	37	-01	34	-06	25.7	40.2
10	63	11	34	-03	-08	-04	03	-06	29	63.0	63	22	12	03	46.5	61.7
11	74	28	19	-04	-03	02	26	-12	16	77.1	79	09	26	11	70.7	79.4
12	22	42	10	10	-14	57	06	02	-35	71.5	18	06	41	24	26.4	53.2
13	05	43	-06	-05	07	28	14	-54	-12	60.6	15	-05	41	04	19.3	42.9
14	-31	-33	-00	20	17	12	-10	03	16	32.8	-28	-05	-28	05	15.9	28.8
15	67	12	09	-05	-10	00	-05	-38	-28	70.0	61	08	22	-07	43.0	65.3
16	41	03	19	-01	-20	-25	03	-60	10	67.7	46	21	13	-05	27.7	56.9
17	00	21	01	86	-01	12	11	-01	-10	81.5	-02	00	23	55	35.3	56.7
18	12	02	08	82	-19	-16	01	-00	13	77.0	05	06	09	47	23.3	54.4
19	39	-00	06	08	-08	-06	81	04	-00	82.8	52	03	-09	44	47.6	68.5
20	11	-01	04	05	-02	-00	88	-08	-05	79.6	32	01	-11	46	31.9	58.7
21	-03	73	03	16	07	17	-04	-12	-17	63.4	-01	04	63	10	40.8	51.9
22	05	64	16	-02	-21	-26	08	-09	14	58.9	12	18	53	02	32.8	49.8
23	07	63	04	06	06	-11	09	04	-04	43.9	11	06	48	06	25.1	41.4
24	14	71	04	10	21	02	-18	04	23	66.3	12	01	58	-01	35.7	57.2
25	16	72	05	01	-20	05	03	-10	03	59.9	18	05	64	07	45.6	53.9
26	-00	-15	07	-08	68	07	01	21	08	54.8	03	-02	-22	-11	06.0	23.4
27	03	48	05	-31	-34	-06	-18	27	-17	58.1	-04	08	40	-18	20.2	42.8
28	-55	07	-08	-01	-08	01	04	30	25	48.2	-48	-09	-03	07	24.8	43.3
29	-21	-02	24	-16	03	-23	03	-07	-57	50.9	-19	35	-03	-10	16.5	34.7
30	-54	03	43	-07	-04	02	04	-06	-01	49.0	-38	40	-00	01	30.1	54.0
31	33	05	82	05	03	01	05	00	-20	83.6	37	76	04	12	73.0	83.4
32	26	04	70	-13	10	-05	-06	24	-06	65.4	29	58	-00	-07	42.6	60.8
33	02	04	54	23	00	-03	-02	08	-41	52.2	01	53	04	15	30.6	46.5
34	-09	13	90	00	-03	-08	.04	-16	-01	87.2	06	83	11	08	71.5	84.5
35	-21	-13	-60	-10	11	02	-09	28	-24	59.5	-32	-49	-16	-15	38.5	56.1
	14.6	10.2	9.2	5.1	4.4	5.2	5.6	4.3	4.1		14.5	7.7	7.9	4.1		

TABLE F-6, WHOLE SCORE FACTOR ANALYSIS : ROTATED FACTOR LOADINGS, CONTROL GROUP

	PRINCIPAL COMPONENTS ANALYSIS (UNITIES IN DIAGONALS) (NS RANGE FROM 94 TO 110)												IMAGE ANALYSIS (SMC IN DIAGONALS) (NS RANGE FROM 94 TO 110)							
SCORE	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	H	I	II	III	IV	V	VI	H	SMC
1	17	-01	-17	-35	01	38	-07	32	-25	-41	-19	69.4	01	06	17	-36	-03	-10	17.3	40.4
2	45	00	-44	08	-18	07	-09	11	47	17	07	72.4	29	-04	-20	16	-55	-13	46.9	67.1
3	13	08	10	-14	03	-03	04	01	05	80	00	70.1	26	03	02	-12	-06	01	08.4	28.1
4	21	50	46	-08	03	10	-16	-05	14	08	-06	53.4	40	31	32	-01	-07	11	37.2	53.6
5	-22	16	01	-10	01	-15	20	06	-01	-27	-64	63.4	-15	07	-05	-05	-04	44	22.8	42.4
6	83	11	05	-03	-00	10	-15	10	08	02	08	75.5	77	06	08	-00	-20	-23	69.5	82.2
7	76	08	-02	-01	06	-03	-23	11	06	24	09	75.8	72	04	-05	02	-29	-23	65.5	83.1
8	63	13	02	-07	-03	-03	-11	-03	18	-31	16	58.8	50	09	-05	03	-12	-23	33.4	55.6
9	53	-22	19	35	-07	01	-10	15	07	06	-04	54.0	33	-15	07	30	-19	-37	39.5	58.6
10	56	41	11	11	18	06	22	13	22	-00	04	66.4	50	46	03	15	-12	-23	55.0	79.3
11	73	02	18	00	00	-01	04	25	30	20	11	77.8	63	06	02	05	-31	-44	70.1	82.4
12	28	-18	49	07	-08	21	-11	30	-03	05	14	53.3	22	-08	40	-02	-09	-34	34.3	48.1
13	-24	09	38	04	01	13	-10	58	12	-17	-12	64.6	-09	12	42	-08	-30	09	30.5	44.5
14	-14	-06	-22	-08	-06	06	-10	-18	01	18	-68	62.7	-25	-09	-20	-05	07	-02	11.7	36.8
15	32	13	01	12	07	03	-27	72	14	00	08	75.5	25	20	19	-01	-57	-20	50.6	73.8
16	29	18	-00	02	-09	01	07	77	06	09	10	75.5	14	33	10	-11	-51	-35	53.1	76.0
17	06	13	-04	87	-06	12	07	01	15	-11	02	83.9	-01	18	19	71	-08	-09	58.6	78.5
18	04	13	02	86	09	03	-05	09	02	-03	11	79.4	-03	20	12	72	-11	-07	58.6	70.4
19	31	-08	00	06	-03	00	-21	12	81	02	-12	82.6	22	-12	-11	19	-50	-36	50.0	74.9
20	18	-06	05	16	00	-04	04	07	84	02	06	78.5	25	-16	01	36	-55	08	53.5	70.2
21	-02	13	21	04	01	78	18	-08	-05	03	16	74.8	-03	11	59	05	12	-06	38.6	67.7
22	22	10	71	-02	-05	25	-03	-01	-02	19	08	66.8	38	02	54	-04	08	-09	44.9	62.1
23	23	-15	08	10	-59	40	-04	08	-20	13	-25	73.2	-08	-07	28	-07	00	-50	34.1	63.0
24	-01	02	16	10	-10	77	-14	09	08	-11	-13	69.7	01	-03	66	03	-12	03	45.6	65.7
25	-04	03	57	07	-02	55	-00	15	06	00	29	74.1	00	05	70	07	-03	-21	54.1	74.0
26	-09	-11	-10	04	49	-20	-14	-27	-26	-05	07	48.0	-07	-06	-28	04	38	-05	23.1	41.5
27	23	10	02	03	75	14	14	17	-07	16	-09	72.7	36	14	11	-01	02	23	21.2	43.0
28	-12	-06	06	19	01	-07	73	-07	-15	07	-13	64.4	-02	-01	07	10	19	41	21.9	56.9
29	-50	28	-18	-10	11	36	-09	38	04	14	16	71.0	-40	33	23	-22	-11	-04	38.1	61.8
30	-24	11	-22	-22	07	10	73	-06	-00	-02	07	72.6	-14	08	-01	-10	01	58	36.9	68.1
31	15	88	03	07	03	07	04	17	-01	01	-08	84.5	20	82	11	03	-15	14	76.9	87.7
32	21	69	03	12	30	01	10	-10	-11	-22	-14	73.5	20	69	-05	16	22	01	59.2	81.0
33	-17	70	-01	16	05	08	-23	-12	-06	09	-02	63.0	-07	58	06	06	11	03	36.5	56.0
34	-05	86	-10	-02	-07	00	18	22	04	06	09	84.3	01	85	02	-09	-15	11	77.1	87.4
35	-12	-63	-01	-05	32	20	-10	-33	04	-04	-25	74.1	-11	-58	-02	-01	37	-12	50.0	76.2
	12.2	10.6	5.7	5.8	4.3	6.5	4.8	6.7	6.0	4.0	4.0		9.5	9.6	7.1	4.6	6.7	6.1		

TABLE F-7. WHOLE SCORE FACTOR ANALYSIS : ROTATED FACTOR LOADINGS, HEAD START

	PRINCIPAL COMPONENTS ANALYSIS (UNITIES IN DIAGONALS) (NS RANGE FROM 68 TO 89)													IMAGE ANALYSIS (SMC IN DIAGONALS) (NS RANGE FROM 68 TO 89)								
SCORE	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	H	I	II	III	IV	V	VI	VII	H	SMC
1	-25	-01	07	-13	35	-17	-43	12	-06	06	-05	-28	52.9	-04	-04	03	05	-44	15	10	23.5	44.3
2	18	02	71	-03	03	21	-15	-09	30	05	07	-10	72.1	12	02	62	-06	-00	26	-13	48.9	60.7
3	18	-08	03	00	01	09	01	82	-10	08	09	12	76.4	13	-13	20	10	31	-01	00	17.7	54.4
4	37	15	02	17	-23	04	33	49	-10	10	24	22	71.5	26	12	11	17	54	-17	01	44.5	62.3
5	-09	-05	08	06	03	-10	03	12	-03	06	02	80	69.5	-04	-07	20	01	04	-25	17	13.9	39.2
6	59	-21	15	-02	15	-05	-22	20	11	36	26	-11	75.8	67	-22	24	16	02	15	-06	60.8	71.3
7	81	-07	-06	03	08	-09	11	06	12	02	14	06	73.3	71	-08	-01	02	28	05	-03	58.9	74.2
8	54	-23	30	06	17	08	-38	24	09	-07	00	10	70.3	45	-26	44	-02	-04	07	-13	48.3	71.0
9	10	-17	-01	-04	-01	-04	-22	01	-10	28	73	-04	73.8	54	-17	-00	11	-10	-25	06	40.6	59.3
10	47	-36	-03	06	-23	16	44	-11	05	12	20	-07	69.5	27	-27	-01	02	61	15	-16	56.4	77.6
11	77	-16	-03	-04	-05	-05	14	15	15	-01	25	-03	75.4	64	-12	06	-05	41	16	-03	61.9	71.0
12	17	10	-03	07	52	17	08	-24	39	07	37	24	75.4	41	09	-09	10	-04	07	-02	20.0	65.2
13	22	15	01	08	52	08	09	-07	13	-39	26	-30	69.6	23	11	-06	01	03	36	01	19.9	43.4
14	-17	09	-01	-04	06	08	-06	-11	07	14	-75	-05	65.7	-46	06	05	02	-11	42	-19	44.6	58.9
15	77	-05	-07	-10	15	17	-07	-11	-16	15	-08	-06	73.8	58	-13	-01	-03	10	15	-26	46.1	64.4
16	58	-12	13	09	16	16	22	06	-30	-12	02	-21	63.2	39	-14	03	04	31	09	-22	31.9	58.9
17	-08	02	11	88	00	07	-11	03	-00	18	-11	04	86.1	-14	02	22	67	-04	-20	-22	61.2	74.2
18	03	-07	07	87	-08	09	-09	-03	-13	-07	03	08	82.4	-04	01	16	52	06	-36	-26	49.7	75.0
19	-07	-04	88	04	-03	-09	-07	05	07	07	-09	19	84.5	-08	-05	73	01	-07	-11	13	57.8	76.2
20	-03	03	78	07	02	-18	-00	00	-18	04	-03	00	67.4	-07	02	62	06	-02	01	15	41.6	56.9
21	08	-13	-06	15	52	-08	03	03	01	39	-05	-48	70.2	19	-22	-13	42	-18	32	-00	40.9	57.1
22	14	07	-07	37	11	-21	18	24	10	60	-02	-18	72.0	18	-03	-01	61	08	11	09	43.7	59.2
23	20	-05	08	-09	78	-19	-04	01	-06	13	-14	08	75.7	19	-12	12	16	-11	56	15	43.6	60.1
24	10	-01	37	05	11	11	-01	02	-04	73	10	12	74.3	19	-05	35	36	04	05	-07	29.7	61.8
25	-04	30	-21	50	14	-15	22	06	07	37	25	-19	72.6	10	22	-19	62	06	04	08	48.6	61.5
26	02	03	09	-07	01	-08	05	-05	82	-05	-13	-07	72.4	-06	11	13	-09	03	44	08	24.8	46.5
27	09	-19	-14	-22	11	04	79	07	06	04	-16	01	78.4	-05	-23	-33	-05	56	10	23	54.7	83.3
28	-34	05	22	-17	05	-34	16	38	19	-41	-01	-13	69.9	-24	05	10	-20	-04	-04	48	33.9	62.1
29	14	-08	-03	07	-18	84	00	09	-00	07	-06	-04	78.8	04	-14	-04	-06	20	-25	-64	53.5	75.4
30	-16	-13	-07	04	02	67	51	15	-13	-14	-06	-05	82.3	-33	-17	-21	-03	52	00	-34	56.3	75.4
31	21	-87	07	-10	00	11	05	01	-04	04	-01	-06	84.8	19	-86	03	-14	10	-06	-11	83.2	90.7
32	17	-66	-15	-09	12	05	-18	06	27	04	06	10	64.3	20	-55	03	-10	-01	19	-06	39.3	59.0
33	-13	-54	-15	11	-06	15	-18	48	10	09	-12	-04	66.6	-03	-48	-04	08	-05	-25	-08	31.4	50.4
34	10	-81	-03	-01	02	24	25	03	-20	04	13	08	86.0	04	-80	-02	-05	36	-02	-13	79.0	92.3
35	-13	75	-16	-17	-01	28	-20	-00	09	07	-11	-03	78.6	-14	66	-11	-07	-16	15	-22	57.5	71.6
	11.0	9.4	6.9	6.3	5.4	5.3	5.9	4.7	4.0	5.5	5.1	4.1		9.7	8.4	6.1	5.7	6.2	4.7	3.9		

TABLE F-8 WHOLE SCORE DESCRIPTIVE MEASURES HOME START

VARIABLE		N	MEAN	STD DEV	SE OF MEAN	MINIMUM	MAXIMUM
SEX	1	160	1.4937	.50153	.39649 -1	1.0000	2.0000
AGE	2	160	58.737	7.8336	.61930	44.000	80.000
OCC	3	154	4.7951	.80133	.64573 -1	4.1200	8.3500
ED	4	147	4.8122	.93067	.76760 -1	1.8400	6.6800
H/P	5	155	1.5355	.50030	.40190 -1	1.0000	2.0000
DPST	6	158	12.842	1.8322	.14576	7.0000	15.000
	7	156	30.673	3.8356	.30709	20.000	36.000
	8	155	12.206	1.7496	.14053	7.0000	16.000
	9	157	11.185	1.0611	.84684 -1	8.0000	12.000
8-B	10	145	5.2345	2.1667	.17994	1.0000	8.0000
PSI	11	156	15.712	6.9133	.55351	1.0000	29.000
SBI	12	159	19.704	4.2717	.33877	4.0000	28.000
	13	160	22.794	4.0718	.32191	6.0000	28.000
	14	158	17.892	6.0745	.48326	5.0000	35.000
POCL	15	156	25.750	6.7715	.54215	5.0000	35.000
	16	159	18.358	5.7603	.45682	4.0000	28.000
FOOD	17	158	13.085	4.9031	.39007	5.4000	39.000
NUT	18	158	8.4907	1.6132	.12834	4.6500	11.300
HT	19	160	41.991	2.1986	.17381	36.750	48.000
WT	20	160	38.256	5.6837	.44934	27.000	63.000
HES	21	160	10.094	2.2732	.17971	5.0000	15.000
	22	160	9.5750	1.6466	.13018	6.0000	12.000
	23	160	9.8687	1.7666	.13967	6.0000	12.000
	24	158	9.5253	1.4038	.11168	6.0000	12.000
	25	160	4.1875	1.3184	.10423	2.0000	6.0000
	26	159	1.6541	.72903	.57816 -1	1.0000	3.0000
MDOS	27	146	7.3904	1.7155	.14198	5.0000	12.000
	28	149	5.4094	1.6066	.13162	4.0000	12.000
8-B	29	148	1.3394	1.2639	.10389	0.	9.3333
	30	148	1.4676	1.2282	.10096	0.	9.0000
	31	148	2.8418	2.5967	.21345	0.	19.000
	32	148	1.0338	1.0803	.88801 -1	0.	6.0000
	33	148	.67897	.85356	.70162 -1	0.	4.0000
	34	146	8.3549	5.0524	.41814	.40000	34.000
	35	146	3.7252	3.1867	.26373	1.9500	24.500

TABLE E-9 WHOLE SCORE DESCRIPTIVE MEASURES CONTROL GROUP

VARIABLE		N	MEAN	STD DEV	SE OF MEAN	MINIMUM	MAXIMUM
SEX	1	110	1.4727	.50154	.47820 -1	1.0000	2.0000
AGE	2	110	58.591	6.5544	.62493	38.000	75.000
OCC	3	104	4.7738	.73247	.71825 -1	4.1200	7.2000
ED	4	99	4.9556	.92951	.93420 -1	2.2800	6.6800
U/R	5	104	1.5577	.49907	.48937 -1	1.0000	2.0000
DDST	6	109	12.633	1.7985	.17226	8.0000	15.000
	7	106	29.811	4.0547	.39382	18.000	36.000
	8	100	12.250	1.7717	.17717	8.0000	16.000
	9	108	11.250	.94844	.91263 -1	8.0000	12.000
8-B	10	99	4.6263	2.0731	.20835	0.	8.0000
PSI	11	104	13.865	6.2614	.61398	1.0000	27.000
SRI	12	109	18.587	4.1660	.39903	5.0000	26.000
	13	110	23.182	3.4646	.33034	14.000	28.000
	14	110	19.291	6.0051	.57257	5.0000	33.000
POCL	15	108	23.491	7.7707	.74773	5.0000	35.000
	16	109	16.789	7.1816	.68787	4.0000	28.000
FOOD	17	108	12.700	5.7653	.55476	1.5000	31.000
NUT	18	108	8.0815	2.0017	.19261	1.4000	11.300
HT	19	110	41.891	2.1833	.20817	35.500	49.500
WT	20	110	38.191	6.3093	.60157	24.000	74.000
MES	21	109	10.055	2.4184	.23164	5.0000	15.000
	22	109	8.7982	1.6599	.15899	6.0000	12.000
	23	110	9.5545	1.7744	.16918	6.0000	12.000
	24	108	9.2407	1.2888	.12402	7.0000	12.000
	25	110	3.9818	1.2920	.12319	2.0000	6.0000
	26	110	1.7727	.80889	.77124 -1	1.0000	3.0000
MBOS	27	109	7.0550	1.8451	.17673	5.0000	13.000
	28	110	4.9545	1.2878	.12279	4.0000	9.0000
8-B	29	97	1.1878	1.0709	.10874	0.	4.3333
	30	97	1.3712	1.1624	.11802	0.	5.2857
	31	97	2.3667	2.2251	.22592	0.	8.8421
	32	97	1.0749	1.1697	.11877	0.	5.0000
	33	97	.64878	.88401	.89758 -1	0.	5.5714
	34	94	7.2863	4.6190	.47642	.28571	17.750
	35	94	4.7989	4.4465	.45862	1.2000	28.660

TABLE E-10 WHOLE SCORE DESCRIPTIVE MEASURES HEAD START

VARIABLE		N	MEAN	STD DEV	SE OF MEAN	MINIMUM	MAXIMUM
SEX	1	89	1.4270	.49744	.52729 -1	1.0000	2.0000
AGE	2	89	57.124	5.2761	.55926	48.000	70.000
OCC	3	85	5.6162	1.2834	.13921	4.1200	8.6700
ED	4	80	5.4200	1.0457	.11691	1.8400	7.5600
M/P	5	85	1.7412	.44059	.47788 -1	1.0000	2.0000
DDST	6	88	13.364	1.4398	.15349	9.0000	15.000
	7	88	30.795	3.0292	.32291	23.000	36.000
	8	88	12.227	1.5367	.16382	8.0000	16.000
	9	86	11.174	1.1396	.12288	8.0000	12.000
8-B	10	84	5.3095	2.0883	.22785	0.	8.0000
PSI	11	87	16.747	5.3964	.57856	4.0000	28.000
SBI	12	85	19.635	3.9936	.43317	9.0000	28.000
	13	88	23.227	3.7007	.39449	13.000	28.000
	14	87	18.644	5.7242	.61370	6.0000	35.000
POCL	15	88	27.386	5.5449	.59108	12.000	35.000
	16	88	20.284	5.5749	.59428	7.0000	28.000
FOOD	17	82	15.829	5.8133	.64198	6.2500	34.860
NUT	18	82	9.7234	1.8814	.20777	5.7300	12.500
HT	19	89	42.424	2.2696	.24058	37.500	49.500
WT	20	89	40.382	6.5009	.68909	28.000	56.000
MES	21	88	10.125	2.1486	.22904	6.0000	15.000
	22	89	9.4607	1.5525	.16457	6.0000	12.000
	23	89	9.6292	1.6746	.17750	6.0000	12.000
	24	88	9.3068	1.3843	.14757	6.0000	12.000
	25	89	4.4719	1.1087	.11753	2.0000	6.0000
	26	89	1.6742	.71946	.76262 -1	1.0000	3.0000
MBOS	27	69	7.7826	2.2483	.27067	5.0000	14.000
	28	68	4.8529	1.2003	.14556	4.0000	9.0000
8-B	29	86	1.3885	1.4101	.15205	0.	9.6667
	30	86	1.2534	1.1590	.12498	0.	7.0000
	31	86	2.5190	2.1573	.23263	0.	9.6000
	32	86	1.0813	1.1255	.12137	0.	4.6667
	33	86	.59479	.59742	.64422 -1	0.	2.4000
	34	81	7.6595	4.3743	.48604	.44444	20.800
	35	81	3.9178	2.7020	.30022	1.2400	14.660

APPENDIX H

Regression Analysis Procedure

Judy McNeil

APPENDIX H

Home Start Program Effectiveness for Differing Characteristics of Mothers and Children

Analytic Procedures

Multiple regression analysis was used to answer the following questions:

1. For what children is Home Start most effective?
2. For what mothers is Home Start most effective, in terms of child outcomes?
3. For what mothers is Home Start most effective, in terms of mother outcomes?

In answer to each of these questions, we were looking for a characteristic or set of characteristics which would distinguish children (or mothers) who benefitted more from their Home Start experience from those who benefitted less. Such a distinguishing characteristic would be more predictive of gains in the Home Start sample than in the Control sample. The regression analyses used to answer the three questions therefore involved the testing of interactions between group and entering characteristics. Before those interaction analyses were performed, the number of entering characteristics to be analyzed for each outcome variable was reduced through some preliminary analyses within each sample, as discussed below.

Seperate analyses for Home Start and Control samples

Initial analyses were performed separately for each sample, Home Start and Control, according to the following sequence. The prescore for a given outcome variable was always included as a covariate in the prediction model because we defined program effectiveness in terms of a child's or mother's gain, not simply a post score. This definition was accomplished statistically by analyzing the post score as a criterion variable while controlling for prescore (by including prescore as a predictor).

Step 1. Question 1 above was addressed first. Child predictor variables were identified and grouped into three categories, Child Prescores, Child Status, and Family Status. Variables in each of these three predictor categories are shown in Table H-1. Child outcome variables were post scores for which prescores were available (also shown in Table H-1).

Step 2. For each of the predictor categories, a regression analysis was performed to determine which of the variables in the category contributed significantly* to the prediction of each of the child outcome variables, over and above the contribution of the prescore for that outcome. This was done by constructing a (full) model which contained as predictors all of the variables in a given predictor category, in addition to the prescore. These regression models were in the following form:

Child outcome = Prescore + (all other) Child Prescores

Child outcome = Prescore + Child Status Variables

Child outcome = Prescore + Family Status Variables

The R^2 value of a full model was then tested against the R^2 values of a series of restricted models, each of which contained all but one of the variables in the predictor category being considered. If the R^2 difference between the full model and a restricted model was significant, then the predictor variable which was missing from that restricted model was considered to contribute significantly to the prediction of that child outcome variable, over and above the prescore and the rest of the predictor variables in that category.

If two or more variables in a predictor category were found through the above analysis to be nonsignificant predictors of the child outcome variable, it was of course possible that each of these predictors was nonsignificant in the presence of the other nonsignificant variables but that one or more of them would be significant alone. Therefore additional analyses were run at this point to verify whether all of the seemingly nonsignificant predictor variables could be eliminated at once (All possible combinations of the nonsignificant variables were progressively restricted out of the model).

The result of the analyses in this step was the identification of a group of significant predictor variables, within each predictor category for each child outcome variable--separately for Home Start and Control samples. Steps 1 and 2 were performed before going on to step 3 because they demonstrated where, in the theoretic framework, effects were occurring.

Step 3. For each child outcome variable, a full model was constructed which contained the prescore and the significant predictor variables from all three predictor categories. The predictive contribution of each of these variables was then tested in the same way as described in step 2. The full regression model at this stage was in the following form:

---

*at $p<.05$

$$\text{Child Outcome} = \text{Prescore} + \text{Significant (other) Child Prescores}$$
$$+ \text{Significant Child Status Variables}$$
$$+ \text{Significant Family Status Variables}$$

The result of this step was the identification of significant child-related predictor variables for each child outcome variable--separately for Home Start and Control samples.

Step 4. Steps 1, 2 and 3 above were repeated for Questions 2 and 3. For Question 2 the criterion variables were the same child outcome variables as those analyzed for Question 1; the predictor categories were Mother Initial Status, Mother Prescores, and Family Status. The variables contained in these categories are shown in Table H-3.

For Question 3, the criterion variables were mother outcome variables (post scores), shown in Table H-5; and the predictor categories were Mother Initial Status, Mother Prescores, and Family Status.

Interaction analyses--combining the Home Start and Control samples

The analysis steps discussed above resulted in a group of significant predictors for each outcome variable, within the Home Start sample and within the Control sample. In order to determine if these groups of predictors were significantly different in the two samples for each outcome variable, interaction analyses were preformed. These analyses also determined if the relationship between the predictors and the outcome variables was the same in the two samples. This sequence of analyses followed the steps described below:

Step 5. Data for both samples were analyzed together. A full regression model was constructed for each outcome variable which contained as predictors: (1) group membership (Home Start or Control), and (2) each predictor found to be significant for that outcome variable in either sample interacted with group membership. The model was in the following form:

$$\text{Outcome} = \text{Group Membership} + (\text{Predictor}_A \times \text{Home Start})$$
$$+ (\text{Predictor}_A \times \text{Control}) + (\text{Predictor}_B \times \text{Home Start})$$
$$+ (\text{Predictor}_B \times \text{Control})$$

To determine whether a given predictor (for example, Predictor_A) was related to the outcome variable in the same manner in the two samples, the R^2 of the above full model was tested against the R^2 of a restricted model which contained Predictor_A alone instead of the two interaction terms. If the comparison was significant, it was concluded that the relationship between the predictor and the outcome variable was different in the two samples. The direction(s) of this relationship was determined by inspecting the regression coefficients. This was done for the two interaction terms if they were significant, or for the predictor variable itself if the interaction was nonsignificant.

Results

Discussion of the results of the above analyses is organized to respond to the these questions stated at the beginning of this section.

Question 1. For what children is Home Start most effective?

Steps 1 through 3 above, as applied to Question 1, resulted in a group of significant child-related predictor variables for each child outcome variable, separately for Home Start and Control samples. These significant predictors are shown in Table H-2 for Home Start and in Table H-3 for Control children.

As can be seen in Tables H-2 and H-3, for child post-scores, there were few significant predictors other than the pre-score for the same variable. In a few instances, for both Home Start and Control, a pre-score on another variable was a significant predictor. For Home Start children, only one child initial status variable (age) was related to any outcomes (Preschool Inventory and POCL Sociability); and only one family status variable (number of siblings) was related to outcomes (Preschool Inventory and SBI Task Orientation). For Control children, no child initial status or family status variables were related to outcomes.

In order to determine if a variable was indicating for which children Home Start was most effective, it was necessary to see if the variable was operating differently in the two groups. For example, if the child's height were equally predictive (and in the same direction--positive or negative) of post-scores for both samples of children, then it could be concluded that height is simply related to outcome, no matter what group the child is in. If, on the other hand, height were related to an outcome differently in the two groups, it might be concluded that the treatment to differentially affecting children on the basis of height.

This differential effectiveness of treatment due to an input variable is tested via interactions of the input variable with the treatment variable, as described in step 5 above. For child outcome variables, as related to child input variables (Question 1), there were no significant interactions. Thus, Question 1 must be answered by saying that, for the child characteristics which were investigated, Home Start was not more effective for any particular group of children who could be identified by child characteristics. The effectiveness of Home Start was, rather, constant across all types of children.

Question 2. For what mothers is Home Start most effective, in terms of child outcomes?

Steps 1 through 3 of the analytic procedures above, as applied to Question 2, yielded a group of significant mother-related predictor variables for each child outcome variable, separately for Home Start and Control samples, as shown in Tables H-4 and H-5. There were a number of significant predictors, other than pre-scores, for some of the outcome variables. While these relationships do not form a consistent interpretable pattern across outcomes or across groups, the individual relationships may be of interest to some readers. For example, the higher the mother's education the higher the child's SBI Task Orientation post-score in both groups; and the more hours that the mother worked per week the greater the child's degree of extraversion, in the Control group.

There were a small number of significant interactions (of mother variables with treatment) which indicate that it may be possible to identify mothers for whom Home Start is most effective in terms of child outcomes. These are shown in Figures H-1 through H-5. Again, the lack of consistent patterns of results makes interpretation difficult; and since these analyses were exploratory in nature, one should hesitate to place much confidence in them until they are replicated on spring 1975 data. A brief description of the interaction results, however, is provided below.

Figure H-1. In terms of the child's DDST Language post-score, Home Start was more effective for mothers with higher pre-scores on HES Mother Involvement than for mothers with lower Mother Involvement scores.

Figure H-2. In terms of the child's SBI Task Orientation post-score, Home Start was more effective for mothers with higher pre-scores on HES Mother Involvement than for mothers with lower such scores.

Figure H-3. In terms of the child's SBI Extra-Introversion post-score, Home Start was more effective for mothers who worked more hours per week. However, this same trend existed, to a greater degree, in the Control group. Therefore, one would not use this pre-score to identify mothers for whom Home Start would be most effective.

Figure H-4. In terms of the child's SBI Extra-Introversion post-score, Home Start resulted in higher child scores when there were fewer siblings in the home. The number of hours the mother works (Figure H-3) was a more powerful predictor in the Control rather than the Home Start sample.

Figure H-5. In terms of the child's post-score on POCL Sociability, Home Start was more effective for mothers with lower pre-scores on 8-Block Feedback. But in no case was Home Start as effective as for the Control mothers, for whom the relationship was in the opposite direction.

Question 3. For what mothers is Home Start most effective, in terms of mother outcomes?

Steps 1 through 3 of the analytic procedures above, as applied to Question 3, resulted in a group of significant mother-related predictor variables for each mother outcome variable, separately for Home Start and Control samples, as shown in Tables H-6 and H-7. Other than the pre-score positively predicting its own post-score, there was no consistent pattern of other significant predictors in either group.

There were a small number of significant interactions (of mother variables with treatment) which indicate possible ways of identifying mothers for whom Home Start is more effective, in terms of mother outcomes. As with the interactions for Question 2, however, these results must be considered tentative at best.

Figure H-6. In terms of the mother's post-score on HES Mother Teaches, Home Start was more effective for mothers with higher pre-scores on this variable than for mothers with lower pre-scores. However, this same trend existed, to a greater degree, in the Control group. Therefore, one would not use this pre-score to identify mothers for whom Home Start would be most effective.

Figure H-7. In terms of the mother's post-score on 8-Block Requests Understanding, Home Start was more effective for mothers with higher pre-scores on 8-Block Corrections.

Figure H-8. In terms of the mother's post-score on 8-Block Feedback, Home Start was more effective for mothers with higher pre-scores on this variable than for mothers with lower pre-scores. However, this same trend existed, to a greater degree, in the Control group. Therefore, one would not use this pre-score to identify mothers for whom Home Start would be most effective.

Figure H-9. In terms of the mother's post-score on 8-Block Corrections, Home Start was more effective for mothers with higher pre-scores on HES Mother Teaches. However, the interaction was significant only because of the strength of the negative relationship in the Control gorup. Therefore, one would not use this pre-score to identify mothers for whom Home Start would be most effective.

Figure H-10. In terms of the mother's post-score on HES Playthings, Home Start was more effective for older mothers than for younger mothers. However, this same trend existed, to a greater degree, in the Control group. Therefore, one would not use this pre-score to identify mothers for whom Home Start would be most effective.

Summary of the Interactions

No child characteristics were identified which would enable one to identify children for whom Home Start would be most effective. In order to maximize the possibility for effectiveness of Home Start by identifying mothers for whom it is expected to be most successful, some interactions were found which might provide tentative clues. These should not be accepted until replicated on spring 1975 data, however. The mother characteristics which may identify mothers and children for whom Home Start would be most effective are: higher pre-scores on HES Mother Involvement, fewer siblings of the target child, lower pre-scores on 8-Block Feedback, and higher pre-scores on 8-Block Corrections.

Table H-1

Variables Contained in Outcome and Predictor Variable Categories Used in Regression Analyses

Child Outcome Variables

- PSI, Post
- DDST Language, Post
- SBI Task Orientation, Post
- SBI Extroversion-Introversion, Post
- POCL Test Orientation, Post
- POCL Sociability, Post
- Nutrition Total, Post

Child Prescores

- PSI
- DDST Language
- SBI Task Orientation
- SBI Extroversion-Introversion
- POCL Test Orientation
- POCL Sociability
- Nutrition Total

Child Status

- Sex
- Age
- Nutrition, Pre
- Height

Family Status

- Urban/Rural
- Socioeconomic Status
- Number of Siblings

Mother Outcome Variables

- HES Mother Involved, Post
- HES Playthings, Post
- HES Mother Teaches, Post
- HES Household Tasks, Post
- HES Books, Post
- Time since visit to doctor, Post
- Reason for visit to doctor, Post
- Shot total, Post
- 8-Block--Requires Understanding, Post
- 8-Block--Feedback, Post
- 8-Block--Corrections, Post

Mother Prescores

- HES Mother Involved
- HES Playthings
- HES Mother Teaches
- HES Household Tasks
- HES Books
- Time since visit to doctor
- Reason for visit to doctor
- Shot total
- 8-Block--Requires Understanding
- 8-Block--Feedback
- 8-Block--Corrections
- Number of Organizations to which mother belongs

Mother Initial Status

- Mother Education
- Hours mother works
- Mother Age

Table H-2

Child and family variables which predict Home Start child post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

CHILD POST SCORES Spring 1974	Child Prescores, Fall 1973							Child Initial Status				Family Status		
	Preschool Inventory	DDST Language	SBI Task Orientation	SBI Extra-Introversion	POCL Test Orientation	POCL Sociability	Nutrition Total	Sex	Age	Nutrition Total Prescore	Height	Rural/Urban	SES	Number of Siblings
HOME START														
School Readiness														
Preschool Inventory	+	+							+					-
DDST Language	+	+												
Social-Emotional Development														
SBI Task Orientation		+	+											-
SBI Extra-Introversion				+	+									
POCL Test Orientation					+									
POCL Sociability						+			+					
Nutrition														
Nutrition Total							+							

Table H-3

Child and family variables which predict Control child post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

CHILD POST SCORES Spring 1974	Child Prescores, Fall 1973							Child Initial Status				Family Status		
	Preschool Inventory	DDST Language	SBI Task Orientation	SBI Extra-Introversion	POCL Test Orientation	POCL Sociability	Nutrition Total	Sex	Age	Nutrition Prescore	Height	Rural/Urban	SES	Number of Siblings
CONTROL														
School Readiness														
Preschool Inventory	+	+												
DDST Language	+	+												
Social-Emotional Development														
SBI Task Orientation		+	+											
SBI Extra-Introversion				+										
FOCL Test Orientation	+				+									
POCL Sociability						+								
Nutrition														
Nutrition Total	+						+							

Table H-4

Mother and family variables which predict Home Start child post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

CHILD POST SCORES Spring 1974	Mother Initial Status			Mother Prescores, Fall 1973							Family Status			
	Mother's Education	Hours Mother Works	Mother's Age	H/S HES Mother Involvement	H/S HES Playthings	H/S HES Household Tasks	Months Since Doctor Visit	8-Block Feedback	8-Block Corrections	Number of Organizations Member	Rural/Urban	SES	Number of Siblings	Covariate Prescore
HOME START														
School Readiness														
Preschool Inventory													-	+
DDST Language				+			+							+
Social-Emotional Development														
SBI Task Orientation	+			+							-	+		+
SBI Extra-Introversion		+[1]											-	+
POCL Test Orientation														+
POCL Sociability								-[1]						+
Nutrition														
Nutrition Total														+

[1] This relationship was not significant within this group, but it is shown because the predictor was found to interact significantly with treatment group and was significant within the other treatment group.

Table H-5

Mother and family variables which predict Control Start child post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

CHILD POST SCORES Spring 1974	Mother Initial Status			Mother Prescores, Fall 1973							Family Status			
	Mother's Education	Hours Mother Works	Mother's Age	H/S HES Mother Involvement	H/S HES Playthings	H/S HES Household Tasks	Months Since Doctor Visit	8-Block Feedback	8-Block Corrections	Number of Organizations Member	Rural/Urban	SES	Number of Siblings	Covariate Prescore
CONTROL														
School Readiness														
Preschool Inventory														+
DDST Language				-[1]							-			+
Social-Emotional Development														
SBI Task Orientation	+			-[1]										+
SBI Extra-Introversion		+											+[1]	+
POCL Test Orientation														+
POCL Sociability								+						+
Nutrition														
Nutrition Total														+

[1] This relationship was not significant within this group, but it is shown because the predictor was found to interact significantly with treatment group and was significant within the other treatment group.

Table H-6. Mother and family variables which predict Home Start mother post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

	Mother Initial Status			Mother Prescores - Fall 1973												Family Status		
Mother Post Scores-Spring 1974	Mother's Education	Hours Mother Works	Mother's Age	H/S HES Mother Involvement	H/S HES Household Tasks	H/S HES Mother Teaches	8-Block Requests Understanding	8-Block Feedback	8-Block Corrections	H/S HES Books	H/S HES Playthings	Months Since Doctor Visit	Checkup/Something Wrong	Immunization Total	Number of Organizations Member	Rural/Urban	SES	Number of Siblings
HOME START																		
Mother/Child Relationship																		
H/S HES Mother Involvement		-		+														
H/S HES Household Tasks					+													
Mother As Teacher																		
H/S HES Mother Teaches						+												
8-Block Requests Understanding	+			+			+		+	-								
8-Block Feedback								+										
8-Block Corrections						+[1]		+	+									
Home Materials For Child																		
H/S HES Books										+					+	-		
H/S HES Playthings			+[1]							+	+							
Medical Care																		
Months Since Doctor Visit								-				+						
Checkup/Something Wrong													+					
Immunization Total											+			+				

[1] This relationship was not significant within this group, but it is shown because the predictor was found to interact significantly with treatment group and was significant within the other treatment group.

Table H-7. Mother and family variables which predict Control mother post scores (Spring 1974). Direction of relationship is shown as positive (+) or negative (-) within treatment groups.

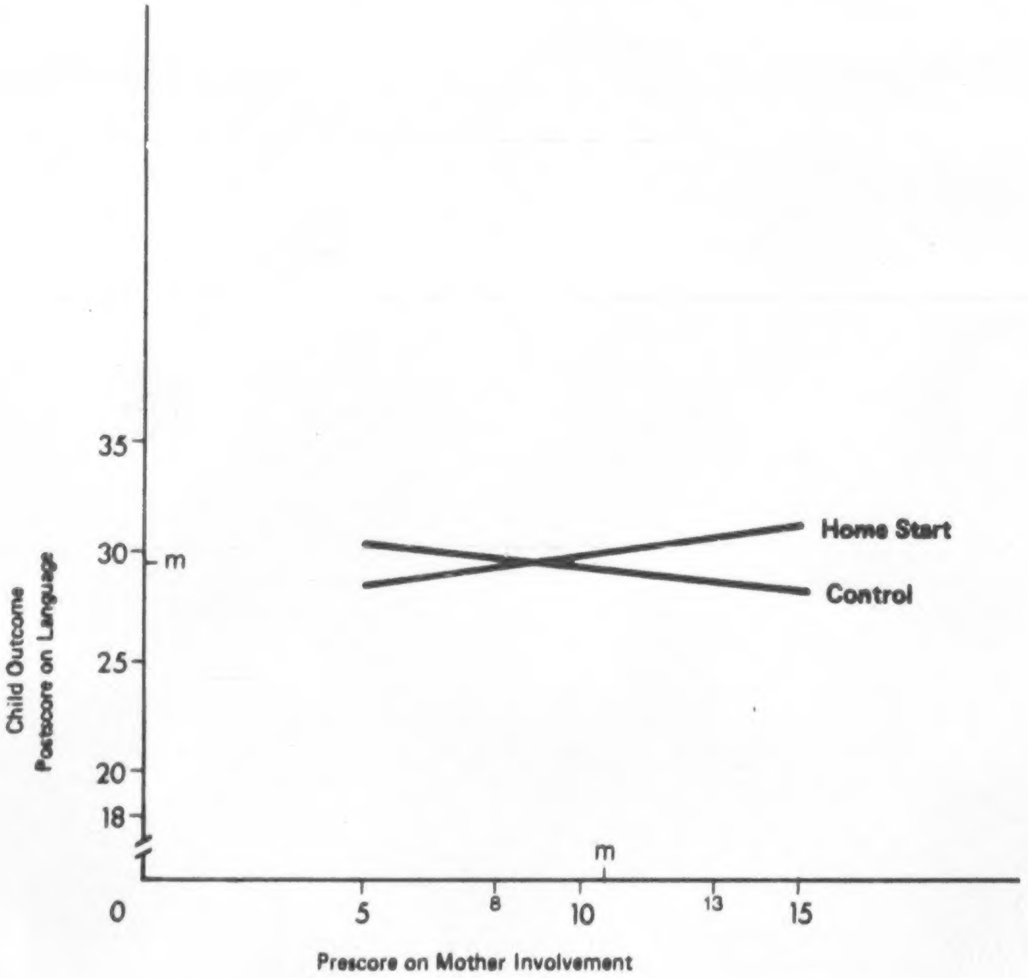
Mother Post Scores- Spring 1974	Mother Initial Status			Mother Prescores - Fall 1973												Family Status		
	Mother's Education	Hours Mother Works	Mother's Age	H/S HES Mother Involvement	H/S HES Household Tasks	H/S HES Mother Teaches	8-Block Requests Understanding	8-Block Feedback	8-Block Corrections	H/S HES Books	H/S HES Playthings	Months Since Doctor Visit	Checkup/Something Wrong	Immunization Total	Number of Organizations Member	Rural/Urban	SES	Number of Siblings
CONTROL																		
Mother/Child Relationship																		
H/S HES Mother Involvement	+			+														
H/S HES Household Tasks					+													
Mother As Teacher																		
H/S HES Mother Teaches						+												
8-Block Requests Understanding							+		–[1]			–						
8-Block Feedback			+					+										
8-Block Corrections						–			+									
Home Materials For Child																		
H/S HES Books										+								
H/S HES Playthings			+								+							
Medical Care																		
Months Since Doctor Visit												+						
Checkup/Something Wrong													+					
Immunization Total														+				

---

[1] This relationship was not significant within this group, but it is shown because the predictor was found to interact significantly with treatment group and was significant within the other treatment group.

Figure H-1

Home Start - Control Interaction: Mother Involvement Prescore
Predicts DDST Language Postscore Differentially in the Two Groups

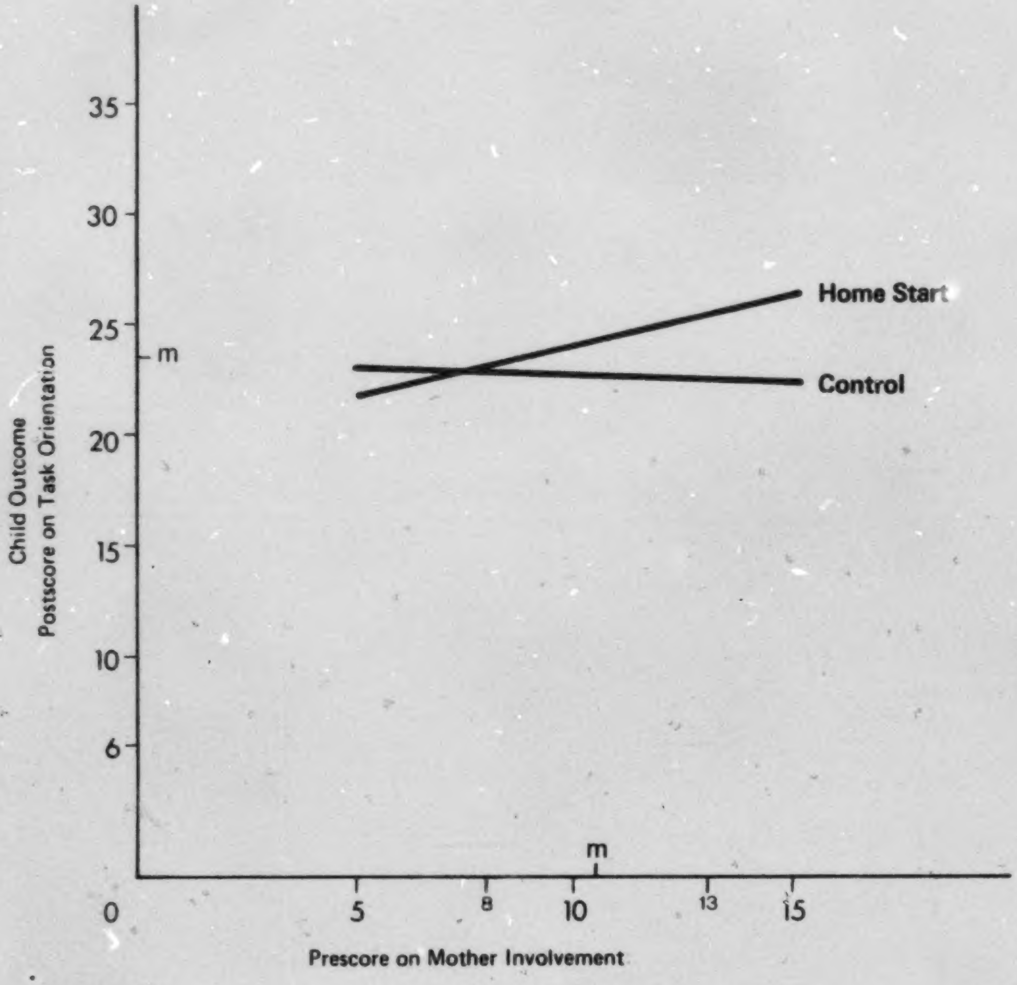


The interaction between treatment group and mother prescore on H/S HES Mother Involvement as it relates to the outcome of child postscore on DDST Language. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Mother Involvement) and derived from the following prediction model:

Postscore on Language = Constant + Treatment Group + Prescore on Language + Prescore on Mo. since Doctor Visit + Urban/Rural + Interaction vectors of Group X Mother Involvement

Figure H-2

Home Start - Control Interaction: Mother Involvement Prescore Predicts Task Orientation Postscore Differntially in the Two Groups



The interaction between treatment group and mother prescore on H/S HES Mother Involvement as it relates to the outcome of child postscore on SBI Task Orientation. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Mother Involvement) and derived from the following prediction model:

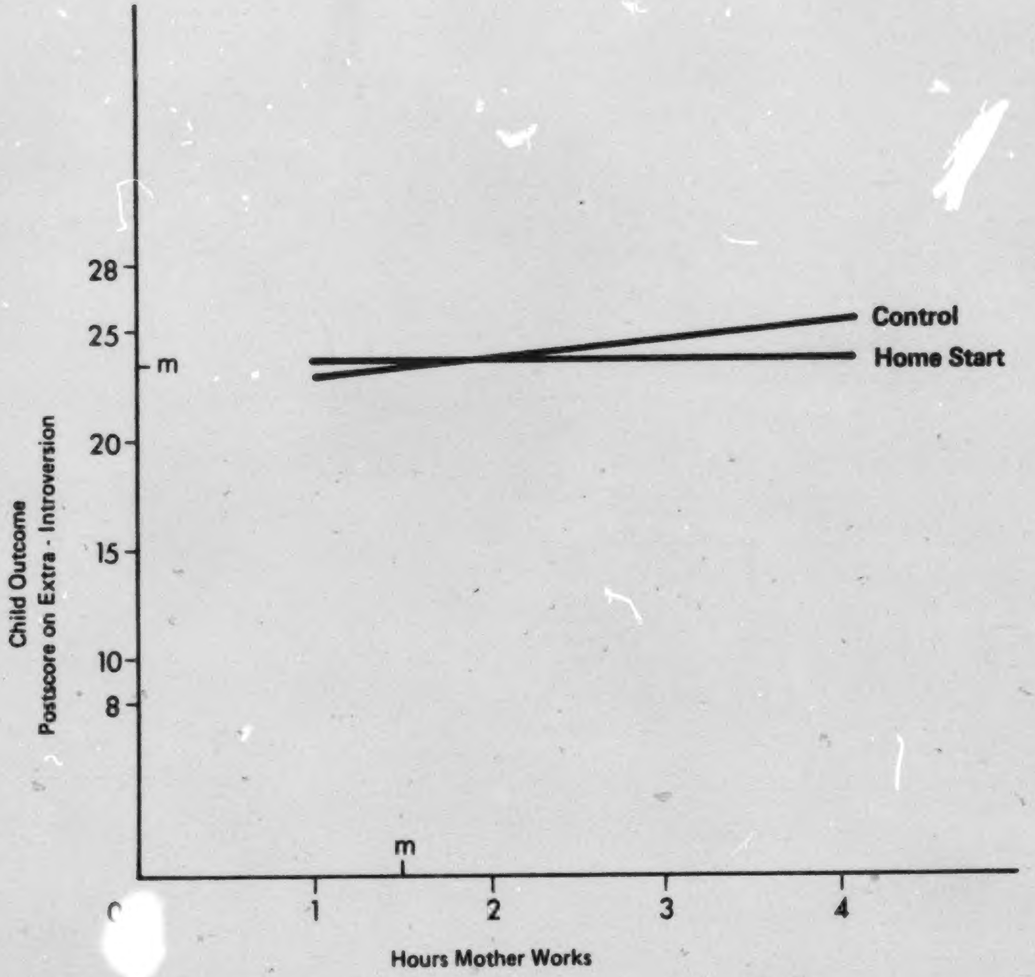
Postscore on Task Orientation = Constant + Treatment Group +

Prescore on Task Orientation + Mother Education + Rural/Urban +

SES + Interaction vectors of Group X Mother Involvement

Figure H-3

Home Start - Control Interaction: Hours Mother Works Predicts Extra-Introversion Postscore Differentially in the Two Groups

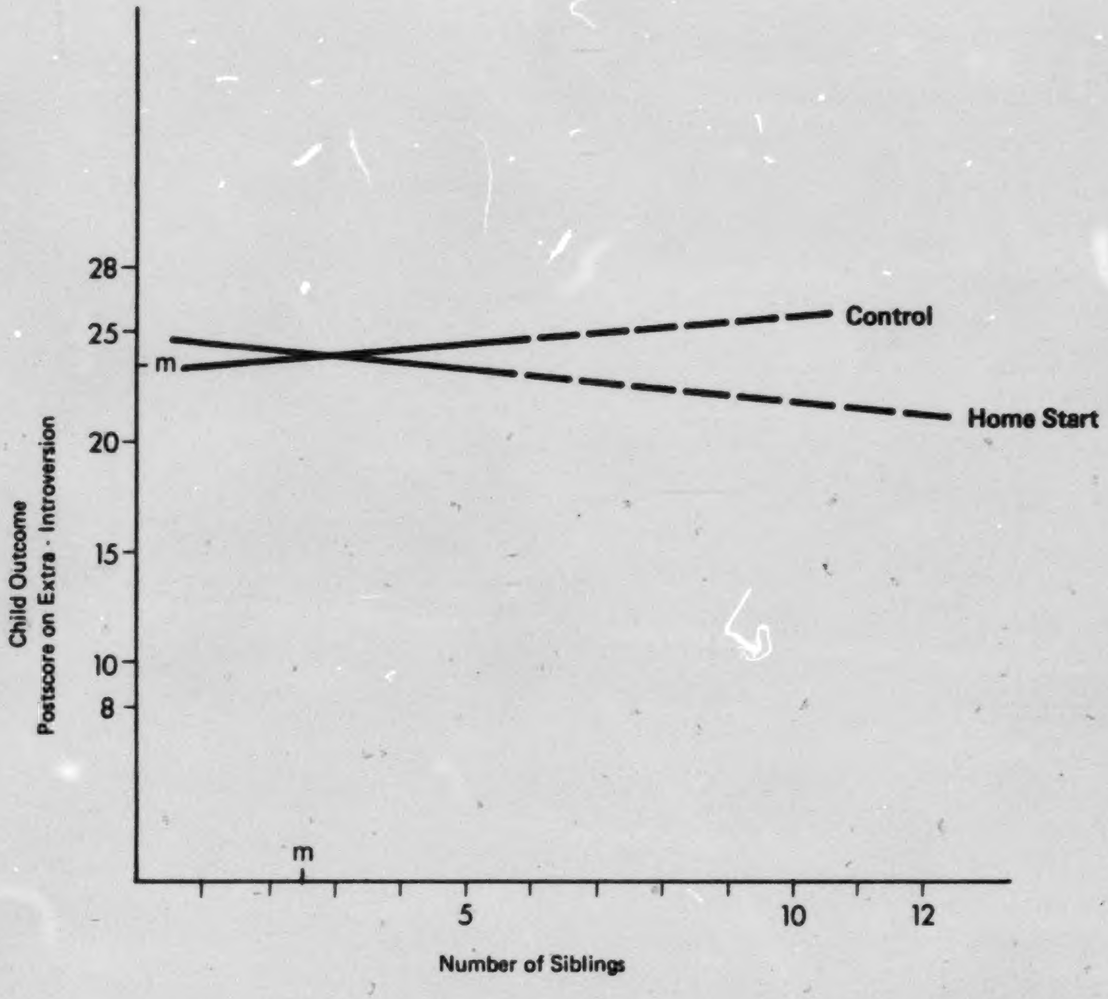


The interaction between treatment group and Hours Mother Works as it relates to the outcome of child postscore on SBI Extra-Introversion. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Hours Mother Works) and derived from the following prediction model:

Postscore on Extra-Introversion = Constant + Treatment Group + Prescore on Extra-Introversion + Interaction vectors of Group X Number of Siblings + Interaction vectors of Group X Hours Mother Works

Figure H-4

Home Start - Control Interaction: Number of Siblings Predicts Extra-Introversion Postscore Differentially in the Two Groups

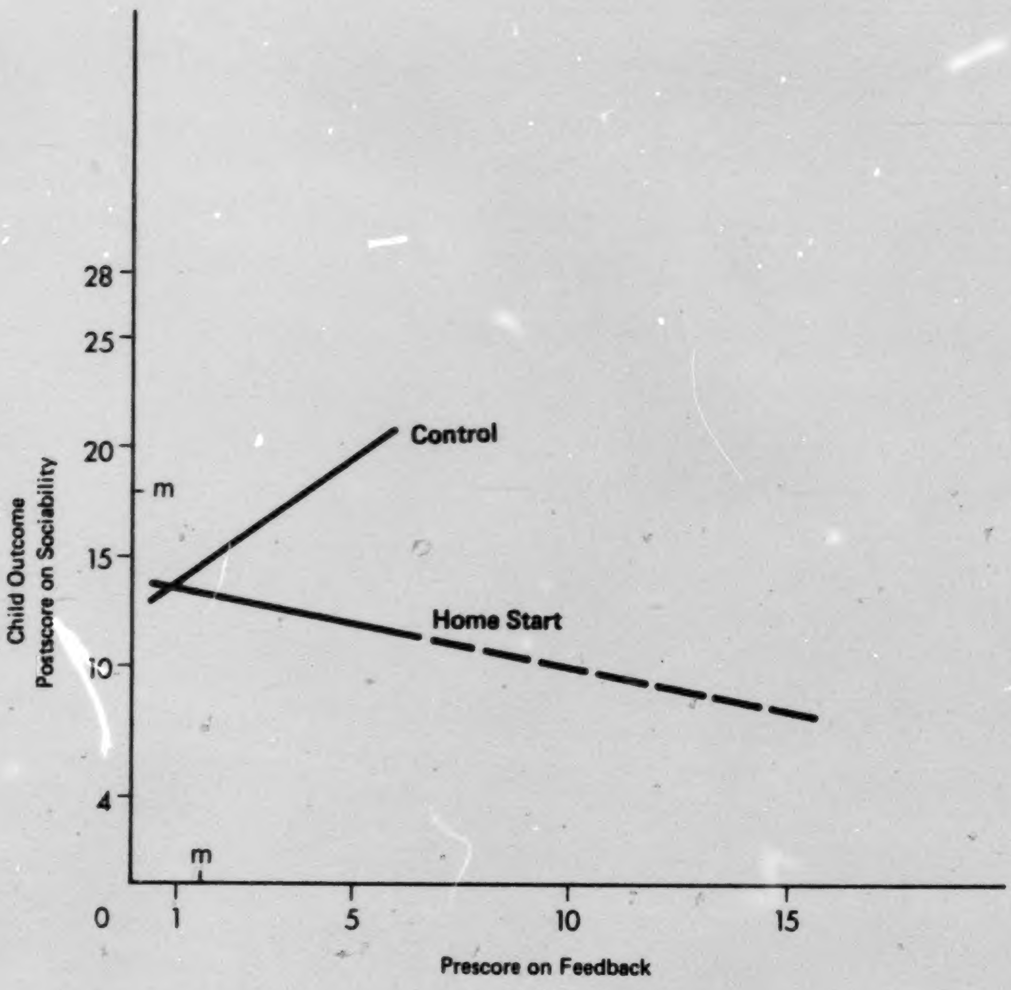


The interaction between treatment group and Number of Siblings as it relates to the outcome of child postscore on SBI Extra-Introversion. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Number of Siblings) and derived from the following prediction model:

Postscore on Extra-Introversion = Constant + Treatment Group + Prescore on Extra-Introversion + Interaction vectors of Group X Number of Siblings + Interaction vectors of Group X Hours Mother Works

Figure II-5

Home Start - Control Interaction: Feedback Prescore Predicts Sociability Postscore Differentially in the Two Groups



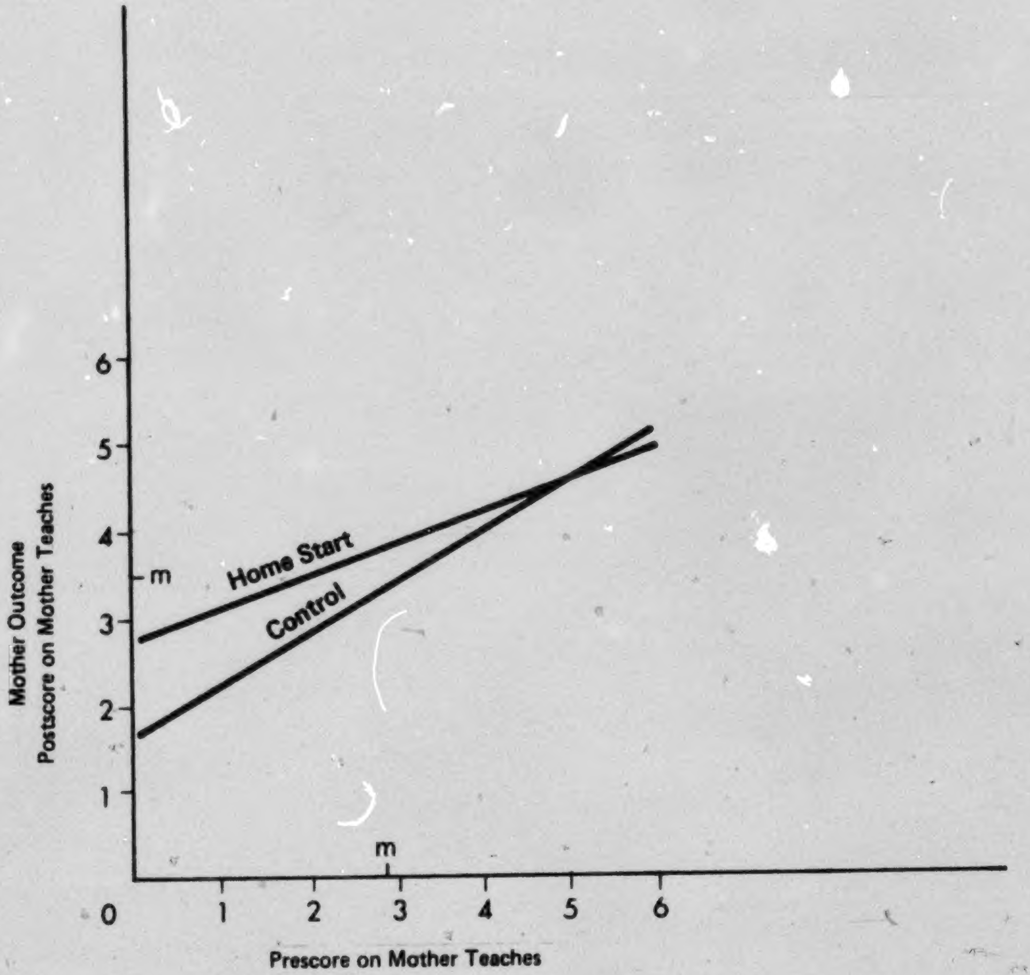
The interaction between treatment group and mother prescore on 8-Block Feedback as it relates to the outcome of child postscore on POCL Sociability. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Feedback) and derived from the following prediction model:

Postscore on Sociability = Constant + Treatment Group + Prescore

on Sociability + Interaction vectors of Group X Feedback

Figure H-6

Home Start - Control Interaction: Mother Teaches Prescore Predicts Mother Teaches Postscore Differentially in the Two Groups



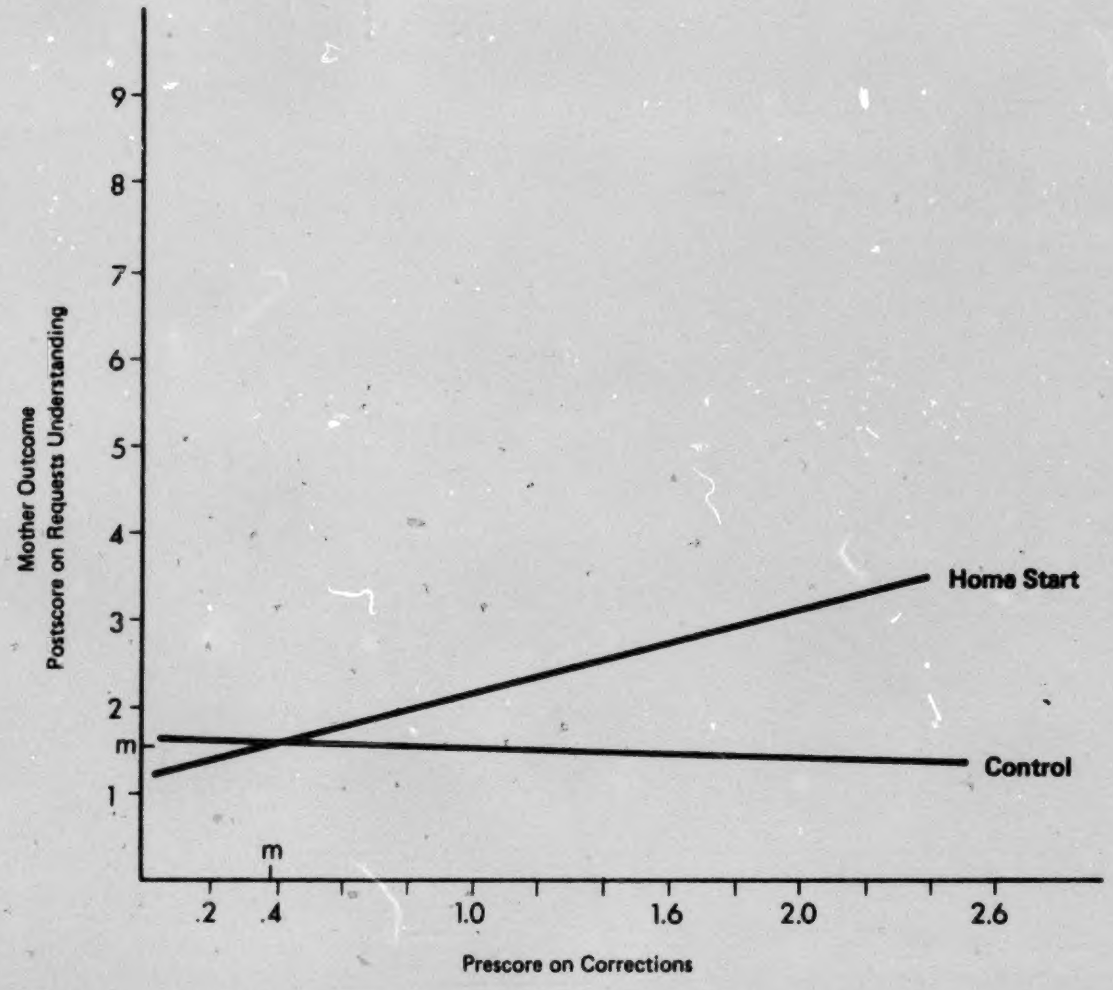
The interaction between treatment group and mother prescore on H/S HES Mother Teaches as it relates to the outcome of mother postscore on H/S HES Mother Teaches. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Mother Teaches) and derived from the following prediction model:

Postscore on Mother Teaches = Constant + Treatment Group +

Interaction vectors of Group X Mother Teaches

Figure H-7

Head Start - Control Interaction: Corrections Prescore Predicts Requests Understanding Postscore Differentially in the Two Groups

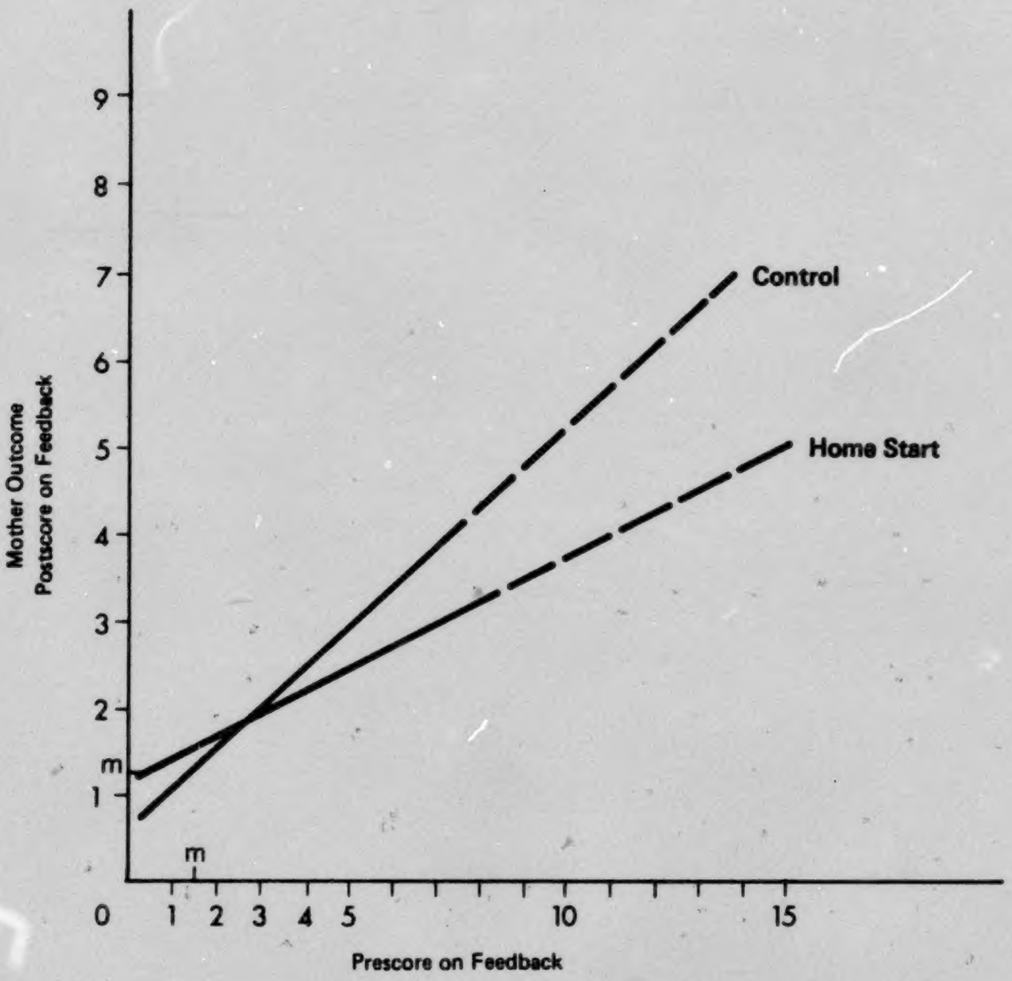


The interaction between treatment group and mother prescore on 8-Block Corrections as it relates to the outcome of mother postscore on 8-Block Requests Understanding. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Corrections) and derived from the following prediction model:

Postscore on Requests Understanding = Constant + Treatment Group + Prescore on Requests Understanding + Mother Education + Prescore on Mother Involved + Prescore on Books + Prescore on Mo. since Doctor Visit + Interaction vectors of Group X Corrections

Figure H-8

Head Start - Control Interaction: Feedback Prescore Predicts Feedback Postscore Differentially in the Two Groups



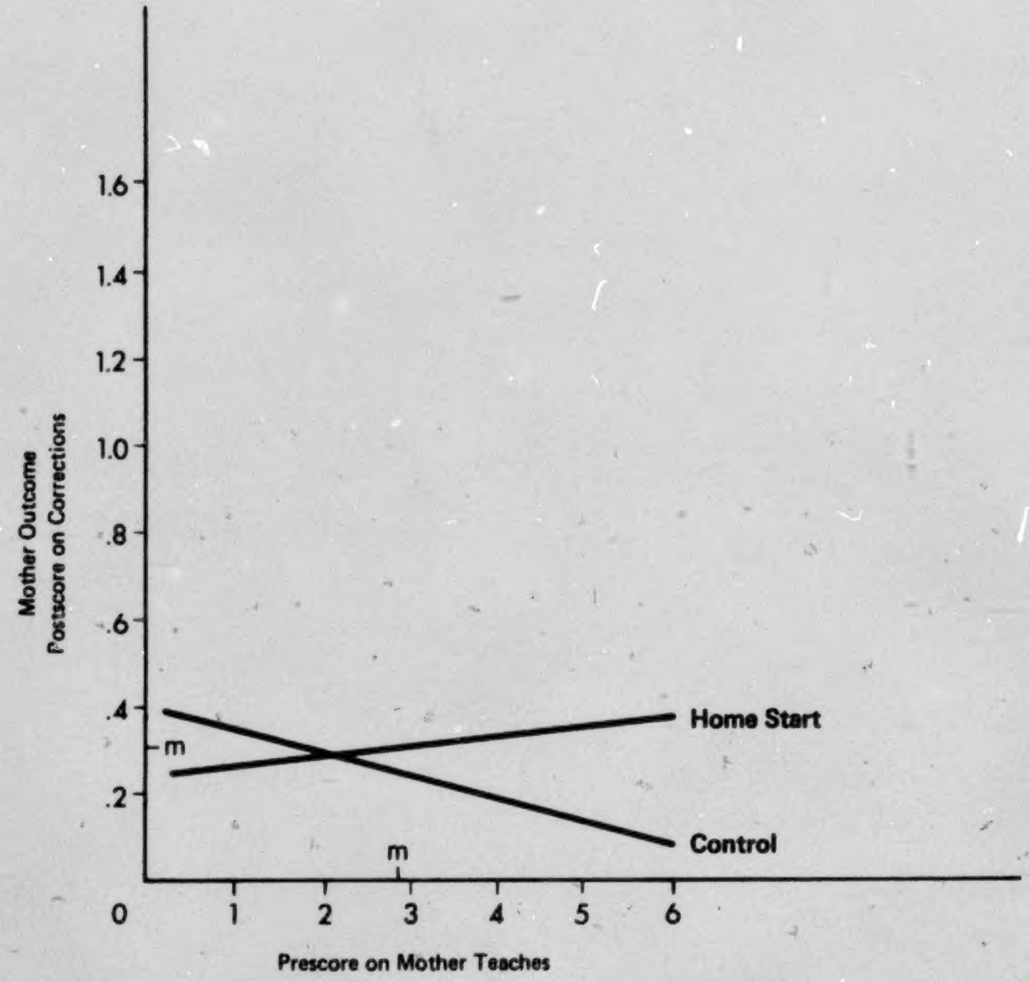
The interaction between treatment group and mother prescore on 8-Block Feedback as it relates to the outcome of mother postscore on 8-Block Feedback. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Feedback) and derived from the following prediction model:

Postscore on Feedback = Constant + Treatment Group + Mother Age +

Interaction vectors of Group X Feedback Pre

Figure II-9

Home Start - Control Interaction: Mother Teaches Prescore Predicts Corrections Postscore Differentially in the Two Groups

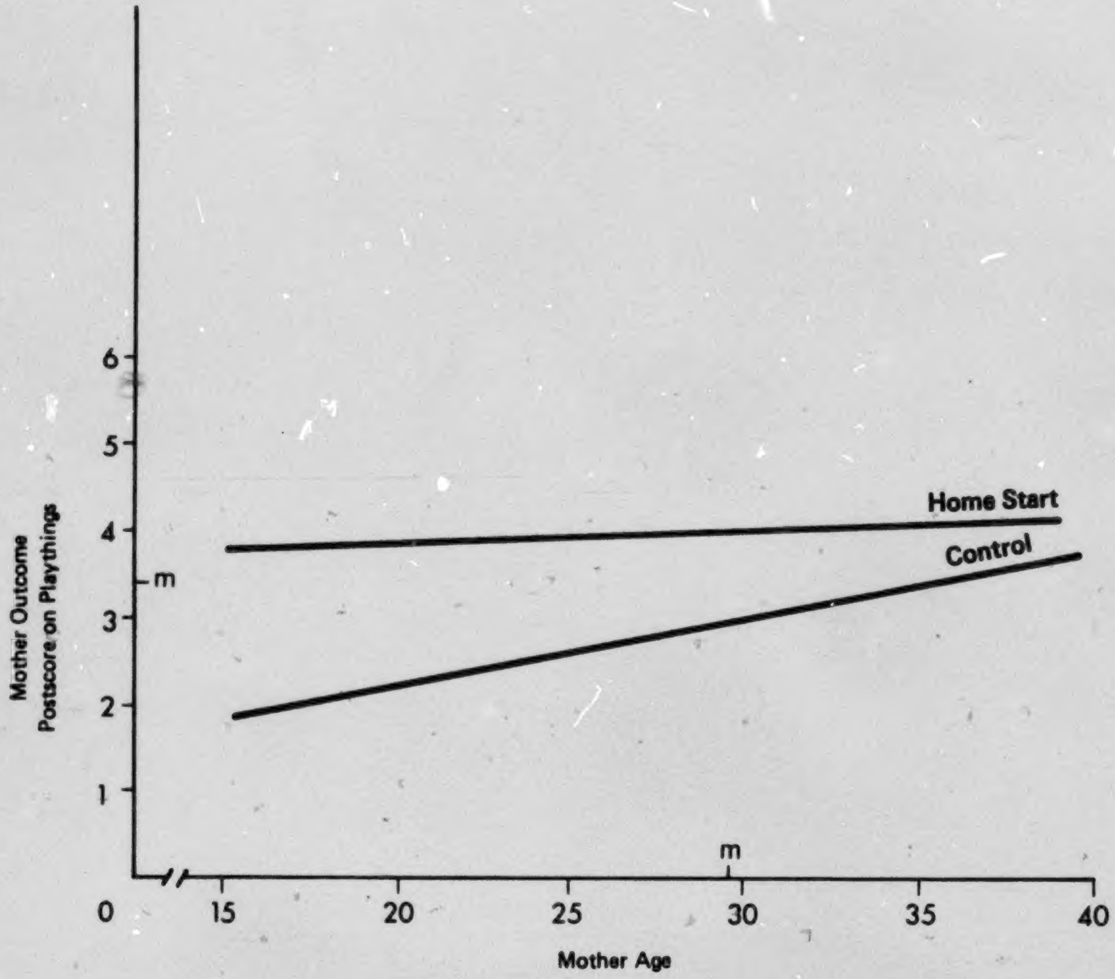


The interaction between treatment group and mother prescore on H/S HES Mother Teaches as it relates to the outcome of mother postscore on 8-Block Corrections. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and Mother Teaches) and derived from the following prediction model:

Postscore on Corrections = Constant + Treatment Group + Prescore on Corrections + Prescore on Feedback + Interaction vectors of Group X Mother Teaches

Figure H-10

Home Start - Control Interaction: Mother Age
Predicts Playthings Postscore Differentially in the Two Groups



The interaction between treatment group and Mother Age as it relates to the outcome of mother postscore on H/S HES Playthings. Depicted are lines of best fit for the interaction (found to be significant over and above the main effects of group and mother age) and derived from the following prediction model:

Postscore on Playthings = Constant + Treatment Group + Prescore on Books + Interaction vectors of Group X Mother Age

APPENDIX I

ABSTRACTS OF RESEARCH ON HOME-BASED INTERVENTION PROGRAMS

The reports abstracted in this appendix are those which met the following criteria: they described educational-developmental intervention programs which were for children under the age of eight years and which were entirely home-based or which contained a home visiting element; they contained a program description and evaluation results based on that program; and they were available to us as of February 1975. We are currently seeking other reports which meet the first two criteria for inclusion in a future, more complete review of home-based intervention programs. The focus of the abstracts is on the evaluation design and results for the programs. Although not addressed in detail in the abstracts, the reviewers were impressed with the quality of the program development effort represented in these reports.

Evaluation Findings

In general, the programs appear to result in benefits for the participants. Every study, with the exception of two, reported significant gains for the experimental group of children as compared with a control group on one or more of the major measures used in the evaluation design. The other two studies (Micotti, 1970, and Tannenbaum, 1969) reported gains for an experimental group, but no control group was used. In addition, ten of the studies reported positive changes in mothers in the experimental groups. Although most of the studies do not go beyond a posttest at the termination of intervention, five of the programs report followup testing from one to four years after intervention (Klaus and Gray, 1968, at two years following intervention; Gray and Klaus, 1970, at four years; Weikart et al., 1970, at up to four years; Levenstein, 1971, at two years; Gordon and Guinagh, 1974, at three years; and Lambie et al., at one year). All of these researchers found evidence that the gains made during intervention remained over time, although in general the differences between the experimental and control groups declined somewhat. Two of the studies of DARCEE programs (Gilmer et al., 1970, and Gray and Klaus, 1970) also found evidence of "vertical diffusion," or benefits to younger siblings.

There was substantial variation in the length of the intervention for individual children and their mothers. Programs ranged from 12 weeks to three and a half years. Two programs were less than six months in duration; six programs were 6 to 12 months long; eleven programs were for 13 to 24 months; and four programs lasted more than 24 months. There was a great variation also in the ages at which children entered the various programs. Some programs began visiting mothers three to six months before their child was born. At the other extreme, some programs worked with first graders and their families. Most programs, however, focused on children who were between two and four years of age at entry.

The evaluations relied heavily on standardized cognitive tests as their measures of outcomes for children. Nearly every study used the Stanford Binet Intelligence Test, along with other such measures as the Peabody Picture Vocabulary Test and the Illinois Test of Psycholinguistic Abilities. Most authors indicated, however, that these tests were not completely reflective of their program objectives, and a large number of the evaluations also used unstandardized measures of children's social behavior, cognitive behavior, and verbal abilities and of mother's attitudes and teaching styles.

Evaluation Methodology

A more thorough discussion of the level and appropriateness of the research methodology used in the program evaluations will be contained in the next draft of this literature review. A few comments, however, seem justified at this point. First, although most evaluations utilized a control or comparison group, there are many doubts to be raised (raised by the researchers themselves) regarding the comparability of these groups to the experimental groups. Second, most researchers are using analyses of variance or t tests appropriately; but many are using them when their hypotheses imply covariance. Some researchers stated their hypotheses in terms of gain but analyzed only post scores. And third, while some of the studies addressed themselves to the relationships between certain mother characteristics, entering child characteristics, and child outcomes, few looked at these relationships within treatment groups or in terms of an interaction with treatment in order to determine for whom programs are most effective.

Policy Issues

While it appears that home-based intervention programs can and do offer certain benefits to their participants, there are a number of issues about those programs, of interest to those who are being asked to fund such programs, which are not being sufficiently addressed. Beyond the question of the general effectiveness of home-based programs, policy makers want to know which programs are most effective and for whom, what kind of staff is necessary for the program, what kind of staff training is most effective, how should staff be organized, how often should visits occur, at what child age should intervention begin, how long should intervention last, and how do these programs compare with others in terms of cost?

Of the policy questions that have been addressed by the studies represented here, none have been addressed sufficiently for a definitive answer. But an impressive number of these questions have been looked at by the individual evaluations. These are summarized below.

Staff professionalism. Ten of the studies determined that paraprofessionals could function effectively as home visitors. Barbrack and Horton (1970) and Levenstein (1971) directly compared the effectiveness of professionals and paraprofessionals in the home visitor role. Findings from these two studies indicate that there may be no differences of practical significance between properly trained paraprofessionals and professionals.

Age at entry and duration of intervention. Comparisons were made between children who entered programs at differing ages by Levenstein (1971), Lambie et al. (1974), and Gordon and Guinagh (1974). Gordon and Guinagh also investigated the effects of differing lengths of intervention. Levenstein found no differences between children who entered at two or three years of age; and Lambie found no differences between infants who entered at 3, 7, or 11 months of age. By contrast, Gordon and Guinagh found that age at entry and duration of intervention did make a difference; the most effective and consistent results were obtained for mothers and children who were in the program continuously for three years, beginning when the child was three months old.

Which program and for whom? While nearly all of the evaluations compared a single treatment with a comparison or control group, two evaluations compared the effectiveness of differing programs. Barbrack (1970) compared the following three home-based treatments: Mother-involved, focusing on cognitive activities; Mother-involved, focusing on gross motor activities; and Child-centered, mother not involved, focusing on cognitive activities. Gilmer et al. (1970) compared the following three treatments, two of which had home visiting elements: Maximum Impact--mothers were trained to participate in the preschool program and received home visits, children attended preschool; Curriculum--children attended preschool; and Home Visitor--mothers were trained in the home to work with their own children. The question of identifying characteristics of parents and/or children which would predict for whom the program would be most effective was addressed by Gordon (1969), Tannenbaum (1969), Weikart et al. (1970), Henderson and Swanson (1973), and Lambie et al. (1974).

Program costs. Program costs were reported in only three of the studies (Barbrack and Horton, 1970; Micotti, 1970; and Bertram et al, 1971). Barbrack and Horton compared costs of three differing treatments; and Micotti compared program costs to that of the estimated cost of kindergarten in the state.

The following pages contain abstracts of the 24 reports reviewed in this draft.

Barbrack, R. The effect of three home visiting strategies upon measures of children's academic aptitude and maternal teaching behaviors. Nashville: DARCEE Papers and Reports, 1970, 4 (1).

PROGRAM AGENCY OR SPONSOR: Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: U. S. Office of Education

PROGRAM METHOD: There were three home visiting treatment groups: 1) Mother - Involved, focusing on cognitive activities; 2) Mother-Involved, focusing on gross motor activities; and 3) Child-Centered Cognitive, mother not involved. Home visitors were community residents, with 40 hours of preservice training.

EVALUATION DESIGN:

SAMPLE: 90 Black mothers and their first grade children. All children had attended a summer Head Start program. Mean child pretest Binet score was 81.45. Eighteen mother-child pairs were assigned to each of five groups: the three treatment groups, a local control and a distal control group.

OUTCOME MEASURES: For children: Post test scores on Stanford Binet and Metropolitan Achievement Test. For mothers: Maternal Teaching Style Instrument.

PREDICTOR MEASURES: Treatment group; prescores as covariates; child's sex.

LENGTH OF STUDY: Program duration was one hour per week for 30 weeks.

FINDINGS:

For children: There were no group differences on post test Binet scores. The cognitive child-centered group was superior to all other groups on the Metropolitan Achievement Test.

For mothers: Of 15 categories of maternal behavior, the mother-involved cognitive group was superior in three categories: Information Responses, Non-verbal Positive Feedback, and Overall Number of Positive Feedback Responses. While the above findings confirmed hypotheses, another finding was contrary to hypotheses: the Mother-Involved Cognitive group was lower in Question Responses than all other groups. Maternal behaviors did not differ as a function of the child's sex.

Summary: Home visiting concentrating on the child, appears to increase the child's achievement. Home visiting, which concentrates on the mother, may increase positive mother behaviors.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and for mothers.

FAMILY CHARACTERISTICS: Groups were compared initially on such family characteristics as educational level of mother, family size, presence of fathers, and quality of housing. No attempt was made to relate these characteristics to outcomes.

PROCESS OF HOME VISIT: Described.

TRAINING OF HOME VISITORS: Described.

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Addressed the issue of whether the home visitor should focus on the mother or the child. Utilized a "distal" control group, located in another community, to control for diffusion effects on the "local" control group.

SHORTCOMINGS: The outcome measures probably did not reflect the actual goals of the program very accurately.

Barbrack, C. R., and Horton, D. M. Educational intervention in the home and professional career development: A first generation mother study. Nashville: DARCEE Papers and Reports, 1970, 4 (3).

PROGRAM AGENCY OR SPONSOR: Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: U. S. Office of Economic Opportunity.

PROGRAM METHOD: Four mothers who were subjects in a previous study, (Maximum Impact Group) were Home Visitor trainees in this study. They each visited three families, one hour a week, for 40 weeks. The aim of the visits was to teach the mother to be an effective educational change agent for her child.

EVALUATION DESIGN:

SAMPLE: Experimental group = 8 girls and 4 boys and their families, ages 40 to 64 months. Comparison group = 7 girls and 5 boys, ages 43 to 53 months. All were Black and from same low-income housing project.

OUTCOME MEASURES: Binet, Peabody Picture Vocabulary Test, DARCEE Concept Test for children; impressions of changes in Home Visitors.

PREDICTOR MEASURES: Treatment group

LENGTH OF STUDY: 40 weeks. Experimental children were tested pre and post, control children were post tested.

FINDINGS: Within Experimental group: 1) No significant pre-post change on Binet or PPVT. 2) Significant pre-post gains on DARCEE Concept Test, all three subtests.

Between Experimental and Comparison groups: 1) No significant differences on Binet or PPVT. 2) Significant difference on Identification subtest of DARCEE Concept Test.

For Home Visitors: gains in self-confidence and competence with their own children.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and for the Home Visitors themselves.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: This was done for the project but not directly researched.

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Used a measure designed to meet their program objectives, DARCEE Concept Test, and found gains on it.

SHORTCOMINGS: No pre-test for comparison group. Only cognitive measures for children. No outcomes for rest of family members were measured.

Barbrack, C. R. and Horton, D. M. Educational intervention in the home and paraprofessional career development: a second generation mother study with an emphasis on costs and benefits. Nashville: DARCEE Papers and Reports, 1970, 4 (4).

PROGRAM AGENCY OR SPONSOR: Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: U. S. Office of Economic Opportunity.

PROGRAM METHOD: The purpose of the home visits was to teach mothers to be effective educational change agents for their children. Three methods were compared: T1, families visited by a professionally trained teacher. T2, families visited by paraprofessional home visitors, trained and supervised by professional. T3, families visited by paraprofessional home visitors, supervised by paraprofessionals. Comparison group.

EVALUATION DESIGN:

SAMPLE: All subjects were Black and from same low income housing project. T1 = 10 boys and 7 girls, 53 to 75 months. T2 = 4 boys and 8 girls, 47 to 64 months. T3 = 3 boys and 7 girls, 46 to 64 months. C = 3 boys and 7 girls, 46 to 64 months.

OUTCOME MEASURES: For children: Binet, Peabody Picture Vocabulary Test, and DARCEE Concept Test for children. For mothers: Maternal Teaching Style Instructions. No pre-tests for Comparison group; no maternal measures for T1 or Comparison mothers.

PREDICTOR MEASURES: Treatment group, child age.

LENGTH OF STUDY: Approximately 10 months, from pre test to post test.

FINDINGS: For children: 1) Child age differed significantly between groups so age was used as a covariate in analyses of DARCEE Concept Test. 2) No significant differences between the four groups on the Binet. 3) No overall differences on PPVT. Significant difference between T3 and Comparison on PPVT. 4) The three treatment groups were superior to the Comparison group on Recognition and Identification subtests of the DARCEE Concept test; T3 was superior to Comparison on the Matching subtest. For mothers: 1) No significant differences between the three treatment groups on Maternal Teaching Style Instrument. 2) T1, T2, and T3 mothers were more specific, more positive, and less negative on post test than on pre test on Maternal Teaching Style Instrument.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for mothers and children.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No, but it does address level of professionalism of home visitors and supervision.

STAFF ORGANIZATION: Yes, whether professional or paraprofessional in home visitor roles and in supervisory roles.

PROGRAM COSTS: Yearly costs for T1 were $440 per child, for T2 were $300 per child, and for T3 were $275 per child.

STRENGTHS: Addresses an important cost issue; seems to indicate that the least costly treatment is at least as effective as the others. Provides a career ladder for mothers as well.

SHORTCOMINGS: No pretest measures for Comparison children, significant age differences in the groups of children; no maternal measures on Comparison mothers.

Bertram, C. L., Pena, D., and Hines, B. W. Evaluation report: early childhood education program, 1969-1970 Field Test. Summary Report. Appalachia Educational Laboratory, May 1971. ED 052 837.

PROGRAM AGENCY OR SPONSOR: Appalachia Education Laboratory, Charleston, West Virginia

FUNDED BY: U. S. Office of Education, HEW

PROGRAM METHOD: Total program consisted of: 1) 30 minute TV lessons broadcast daily, 2) weekly home visits by paraprofessionals for discussion and materials drop off, 3) group instruction weekly for parents and children. Treatments consisted of the following three combinations: 1) whole package, 2) TV and home visit, and 3) TV only.

EVALUATION DESIGN:

SAMPLE: 300 children were assigned to the three treatment groups, approximately 100 children in each group. 40 children were in a comparison group. The socioeconomic characteristics of the families closely resemble the overall population of the state (West Virginia). Children were 3, 4 and 5 years old.

OUTCOME MEASURES: PPVT, ITPA, Appalachian Preschool Test of Cognitive Skills, Frostig, social skills, Parent assessment.

PREDICTOR MEASURES: Treatment group

LENGTH OF STUDY: This is a report on the 2nd year data from a 3-year field test.

FINDINGS: Language: although there were few significant differences between groups, the authors note a definite trend toward an increased language development for children in the treatment groups (as opposed to a comparison group). A significant treatment effect was observed for a measure of transformational grammar.

Cognitive: Scores on a criterion-referenced test of cognitive objectives favored the two groups which received the mobile classroom and/or home visitors over a group which received TV only. The two home visit groups also scored significantly higher on a measure of vocabulary level.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children. Results for parent attitudes are unclear.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: Described briefly.

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: Total cost of operation for the program was approximately $250 per child. This was compared to an estimated cost of kindergarten in West Virginia at $496 per child.

STRENGTHS: Includes a description of the television production and mobile classroom, information on the mechanics of start-up and operation, maintenance, and response to the TV programs.

SHORTCOMINGS: Technical data on results are not presented in this report but are contained elsewhere.

Forrester, B. J., Hardge, B. M., Outlaw, D. M., Brooks, G. P., and Boismier, J. D. The intervention study with mothers and infants. Nashville: George Peabody College for Teachers, 1971. (Mimeo)

PROGRAM AGENCY OR SPONSOR: Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: National Program on Early Childhood Education, Central Midwestern Regional Educational Laboratory (U. S. Office of Education).

PROGRAM METHOD: One home visitor visited each home for one hour a week for 24 visits. The home visitor demonstrated and reinforced behavior of the adult caretaker that provides for the physical, emotional, social, and intellectual development of infants. Visits focused on physical care, observing behavior, positive rewards, mother involvement with the infant, and expectations of mothers.

EVALUATION DESIGN:

SAMPLE: 20 mother-infant diads were in the experimental group and 20 in the Comparison group. Infants were between 7 and 9 months at the beginning of the project. Mothers, some White and some Black, were from low income homes.

OUTCOME MEASURES: Infants were tested using the Griffith Mental Development Scale, the Uzgiris-Hunt Infant Psychological Development Scale, and the Bayley Scales of Infant Development. Maternal Behavior during testing was observed. Homes were rated using the Caldwell Inventory of Home Stimulation.

PREDICTOR MEASURES: Treatment group

LENGTH OF STUDY: Weekly home visits for 24 visits.

FINDINGS:

For infants: 1) Bayley Scales: Experimental group infants scored significantly higher than Comparison infants on the Mental Scale; no difference on the Motor Scale. 2) Griffith Scales: Experimental group infants scored significantly higher than Comparison infants on the overall score, Hearing and Speech, and Eye and Hand Scales; no differences on the Locomotion, Personal-social, and Performance Scales. 3) Uzgiris Hunt Scale: Experimental infants scored significantly higher on the total score, Visual Pursuit and Permanence of Objects, Development of Schemas, Construction of Objects in Space, and Imitation Scales; no differences on the Development of Means and Development of Casuality Scales.

No findings are reported for mothers.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for infants.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Showed gains on some subtests of all three infant measures.

SHORTCOMINGS: Focused only on infant gains.

Gilmer, B., Miller, J. O., and Gray, S. W. Intervention with mothers and young children: a study of intrafamily effects. Nashville: DARCEE Papers and Reports, 1970, 4 (11).

PROGRAM AGENCY OR SPONSOR: Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: National Program on Early Childhood Education, Central Midwestern Regional Educational Laboratory.

PROGRAM METHOD: Three treatments were contrasted: 1) Maximum Impact--mothers were trained to participate in preschool program and received home visits; children attended preschool. 2) Curriculum--children attended preschool. 3) Home Visitor--mothers were trained in home to work with their own children. Fourth group was a Comparison group--attended another preschool.

EVALUATION DESIGN:

SAMPLE: 80 families from a Black, low income housing project. Twenty families were assigned to each of 4 groups. In each family there was a target child between 3 and 4 years of age, and a younger sibling.

OUTCOME MEASURES: For children: Binet, Peabody Picture Vocabulary Test, DARCEE Basic Concept Test. For mothers: impressions of changes in mothers' lifestyles.

PREDICTOR MEASURES: Treatment group

LENGTH OF STUDY: One to two years for each family.

FINDINGS: For target children: 1) On the Binet, Maximum Impact and Curriculum groups were significantly superior to Home Visitor and Comparison groups. 2) No significant group differences on PPVT. For younger siblings: 1) On the Binet, Maximum Impact and Home Visitor groups were significantly superior to Curriculum and Comparison groups. 2) Maximum Impact and Home Visitor groups were significantly superior to Curriculum and Comparison groups on all subtests (Matching, Recognition, and Identification) of the Basic Concept Test. 3) No differences on the PPVT. For mothers: changes in lifestyle, including greater economic viability for mothers who participated in Maximum Impact and Home Visitor groups.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for target children, for younger siblings, and for mothers.

FAMILY CHARACTERISTICS: Not as related to outcomes--only to equate groups; and groups were somewhat different on demographic variables.

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Studied the phenomenon of "vertical diffusion," or the effects on a younger sibling of the target child when the mother is involved in the treatment. Found evidence of such "vertical diffusion."

SHORTCOMINGS: Comparison group children were approximately one year older than treatment group children. Groups differed on demographic variables, but there were no significant differences between mother's prescores on WAIS.

Gordon, I. J. Early childhood stimulation through parent education. Final report to the Children's Bureau, Social and Rehabilitation Service, Department of Health, Education and Welfare. Gainesville, Florida: University of Florida, Institute for Development of Human Resources, 1969. ED 038 166

PROGRAM AGENCY OR SPONSOR: Institute for Development of Human Resources, University of Florida

FUNDED BY: Children's Bureau, Department of Health, Education and Welfare.

PROGRAM METHOD: Disadvantaged women were selected, instructed, and became home visitors to teach other disadvantaged mothers ways to stimulate the perceptual, motor, and verbal activities of their infants. Each mother was visited once a week. One comparison group received no visits, and another comparison group was visited monthly by graduate nurses to control for the effect of simply being visited.

EVALUATION DESIGN:

SAMPLE: The experimental group had 150 families and the two comparison groups had 30 families each. They were disadvantaged families from a rural area in central Florida.

OUTCOME MEASURES: For children: Parent-Educator Weekly Report, the Goldman Race Awareness Test, and the Griffith and Bayley Infant Scales. For Mothers: Parent-Educator Weekly Report, the Rotter Social Reaction Inventory, the Markie-Voice Language Assessment, estimates of mother expectancy.

PREDICTOR MEASURES: Treatment group; length of treatment time

LENGTH OF STUDY: Some families received home visits from the time the infants were three months old until they were two years old; a second group received visits from three months to one year; a third group received visits from one year to two years.

FINDINGS: There were no differences between child outcomes for the two control groups. At 12 months of age, experimental infants were significantly ahead of control infants on total scores of the Griffith Mental Development Scales.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children. And later reports address outcomes for children and for mothers.

FAMILY CHARACTERISTICS: Later reports address the relationship between mother characteristics, child characteristics, and outcomes.

PROCESS OF HOME VISIT: Described

TRAINING OF HOME VISITORS: Described.

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: The design made it possible to address the issue of the age at which visits should begin and the length of time they should continue for maximum benefits. These issues are dealt with in later reports.

SHORTCOMINGS:

Gordon, I. J. and Guinagh, B. J. A home learning center approach to early stimulation. Gainesville, Florida: Institute for Development of Human Resources, University of Florida, November 1974.

PROGRAM AGENCY OR SPONSOR: Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida.

FUNDED BY: National Institute of Mental Health; Fund for the Advancement of Education; and Children's Bureau, HEW.

PROGRAM METHOD: See abstract of Gordon (1969). Length and timing of intervention was varied for six treatment groups; a seventh group received home visits from 24 months to 36 months of age and participated in a group program as well (HLC Program).

EVALUATION DESIGN:

SAMPLE: 149 families in seven treatment groups; 55 control families. All were disadvantaged (indigent) families from rural central Florida. Criteria for children: single birth, no breach or caesarean delivery, no complications, no evidence of mental retardation.

OUTCOME MEASURES: For children at age six: Binet, Caldwell Preschool Inventory, Task Oriented Behavior Scale. For mothers: interview data.

PREDICTOR MEASURES: Treatment group, sex, mother characteristics, age at entry, length of intervention.

LENGTH OF STUDY: Length of intervention varied from one to three years, beginning at birth, one, or two years. Follow up was to age six.

FINDINGS: 1) Low attrition rate supported the hypothesis that the home-and-center-based program could be sustained for children ages two to three and their mothers.

2) Useful intellectual and personality materials could be and were developed.

3) The most effective and consistent results were obtained for mothers and children who were in the program continuously from the child's age three months through three years. The next most effective intervention was that which lasted two consecutive years, either from three months to two years or from one year to three years of age. IQ (Bayley and Binet) findings over time: at age two, no significant differences. At age three, children who participated for three years were significantly higher than controls. At age four, treatment groups were higher than controls: participation for three years, participation for years one and two, participation for years two and three, and HLC. At age five, two treatment groups were higher than controls: participation for three years and participation for first year only. At age six, findings were the same as for age four.

4) No sex differences were found on the Binet scores.

5) For mothers: Generally, in comparison to controls, mothers who had participated for two or more consecutive years were more willing to let their children choose their own occupational goals and want them to have more education. They see their children as being able to do academic things better than other children and as teaching their siblings. These mothers are also more likely to continue their own education and to change their job status in an upward direction. HLC mothers want more education for their children than do control mothers.

6) Mother attitudes toward self and toward the project were related to child Binet scores at age three and at age six. The relationships were somewhat different for boys and girls.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers.

FAMILY CHARACTERISTICS: Yes, mother variables at child's age three were found to be related to child outcomes at ages three and six.

PROCESS OF HOME VISIT: No.

TRAINING OF HOME VISITORS: Described.

STAFF ORGANIZATION: Described for HLC program, which included group-center program.

PROGRAM COSTS: No.

STRENGTHS: Addresses the issue of when intervention should begin and how long it should continue for maximum benefit. Presents longitudinal followup data, still supportive of earlier findings.

SHORTCOMINGS: Some better child outcome measures in socioemotional areas would have been useful.

Gray, S. W. AND Klaus, R. A. The early training project: a seventh-year report. Child Development, 1970, 41, 909-924.

PROGRAM AGENCY OR SPONSOR: George Peabody College for Teachers, Nashville, Tennessee

FUNDED BY: National Institute of Mental Health and National Institute of Child Health and Human Development.

PROGRAM METHOD: (See summary of Klaus and Gray, 1968)

EVALUATION DESIGN:

SAMPLE: (See summary of Klaus and Gray, 1968) In addition, 100 younger siblings were tested.

OUTCOME MEASURES: Stanford-Binet, PPUT, and Metropolitan Achievement Test.

PREDICTOR MEASURES: Treatment groups; initial IQ score of target child used as a covariate in analyses of younger siblings.

LENGTH OF STUDY: Seven years: two to three years of intervention and four years of follow-up testing through grade 4.

FINDINGS: For children: For the two additional years of follow-up contained in this study, the treatment groups remained superior to the control groups on the Binet. The treatment groups were superior to the control groups on the PPVT in grade 3 but not grade 4. On the Metropolitan Achievement Test, the treatment groups were generally superior to the control groups, and the local control was superior to the distal control group. For younger siblings: Experimental group siblings were superior to control group siblings on the Binet. Differences were greater for siblings who were closer in age to the target child.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for target children and their younger siblings.

FAMILY CHARACTERISTICS: Described.

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Took an initial look at the diffusion of effects from the target child and mother to a younger sibling. This led to a later direct study of "vertical diffusion" of program effects to siblings - see summary of Gilmer et al. (1970).

SHORTCOMINGS:

Henderson, R. W. and Swanson, R. The socialization of intellectual skills in Papago children: the effects of a parent training program. Tucson, Arizona: University of Arizona, July 1973. ED 081 471.

PROGRAM AGENCY OR SPONSOR: Center for Educational Research and Development, University of Arizona, Tucson.

FUNDED BY: Arizona State Department of Education and the Indian Oasis Elementary School District 40, Sells, Arizona

PROGRAM METHOD: Two paraprofessionals, bilingual in English and Papago, were trained to instruct three cohorts of parents in stimulating causal questions by their children. Semi-weekly training meetings were held. These were supplemented with home visits to help the parents work with their children in the homes.

EVALUATION DESIGN:

SAMPLE: There was no control group. Baseline data was obtained and three cohorts participated in order to have three replications of the experiment. 30 families participated; they were Papago Indian families who had children in the first grade.

OUTCOME MEASURES: An individually administered test of question-asking performance.

PREDICTOR MEASURES: Treatment.

LENGTH OF STUDY: Unclear.

FINDINGS: All cohorts of children made gains in causal question-asking. These gains were maintained over time, and gains seemed to increase even after termination of intervention. Children in each cohort who did not gain could be identified in initial modelling trials.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children.

FAMILY CHARACTERISTICS: No.

PROCESS OF HOME VISIT: Described.

TRAINING OF HOME VISITORS: Described.

STAFF ORGANIZATION: No.

PROGRAM COSTS: No.

STRENGTHS: The procedures are well described, and the theoretic rationale is well developed.

SHORTCOMINGS: No control group was utilized, but the replication design lends considerable support to the conclusion that the findings are not based on chance. Gains appeared to be maintained over time, but the length of time between testing sessions was not specified.

Jew, W. Helping handicapped infants and their families: The Delayed Development Project. Children Today, 1974, 3, 7-10.

PROGRAM AGENCY OR SPONSOR: Delayed Development Project, connected with the Walton Development Center and the Stockton Unified School District, Stockton, California.

FUNDED BY: U. S. Office of Education: Title VI of the Elementary and Secondary Education Act and Title VI-B of the Education for the Handicapped Act.

PROGRAM METHOD: Beginning as soon as possible after birth, handicapped infants and their families receive weekly home visits up to the age of 18 months. Home visitors are teachers and/or physical therapists. Visits focus on supportive help and training for the parents in developmental stimulation for the children. From 18 months to 3 years of age, when the children enter other educational programs, children and parents participate in a center-based program. Evening group meetings are held for parents in both home and center programs.

EVALUATION DESIGN:

SAMPLE: 90 handicapped infants and their families have participated in the program over a 3-yearperiod. Twelve children and their families were selected as an out-of-town comparison group; 12 children were selected as a local comparison group. All three groups evidenced the same types of handicaps: vision, hearing, speech, motor and mental impairments.

OUTCOME MEASURES: For children: Denver Developmental Screening Test. For parents: Attitude scales and staff perceptions of parent attitudes and parenting skills.

PREDICTOR MEASURES: Treatment group.

LENGTH OF STUDY: Findings were over a three-year period. Children participated varying amounts of time.

FINDINGS: For children: Experimental children consistently made greater gains on the Denver Developmental Screening Test than did the control group. Experimental children made significant gains on all four areas of the DDST; control children gained on no more than two areas of the DDST. For parents: Experimental parents made significant attitude changes in the direction of feeling more secure as parents. They, their spouses, and the staff also felt their functioning as parents improved.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and parents.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: Described briefly.

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: An interesting approach to the use of home-visiting as part of an intervention program for handicapped children, providing emotional and educational support for parents.

SHORTCOMINGS: Because this report was mainly concerned with describing the program, the research results were abbreviated and could not be adequately evaluated.

Karnes, M. B., Sutdley, W. M., Wright, W. R., and Hodgins, A. S. An approach for working with mothers of disadvantaged preschool children. Merrill-Palmer Quarterly, 1968, 14, 174-183.

PROGRAM AGENCY OR SPONSOR: Institute for Research on Exceptional Children, College of Education, University of Illinois

FUNDED BY: USOE

PROGRAM METHOD: 11 weekly two-hour training sessions for mothers on making and using educational materials in the home, instruction in readiness and discussions of mothers' activities of preceding week. Conducted by three experienced preschool teachers who also visited each home at two-week intervals.

EVALUATION DESIGN:

SAMPLE: 13 mother-child pairs: at beginning children ranged in age from 3-3 to 4-3. Randomly assigned control group of 13 children matched on IQ and sex. All families were Black.

OUTCOME MEASURES: Stanford-Binet, ITPA

PREDICTOR MEASURES: Group

LENGTH OF STUDY: 12 weeks

FINDINGS:

1) Stanford-Binet: t test of difference between groups in gain scores showed experimental group gained significantly more than control (mean IQ gain of 7.46 vs. .07).
2) ITPA: Experimental group gained significantly more than control on three subtests (Visual Decoding, Auditory-Vocal Association and Auditory-Vocal Sequential); no difference between groups on other subtests.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for the child

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: Yes, described briefly

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Families randomly assigned to group.

SHORTCOMINGS: Small sample size; brief duration of the program.

Karnes, M. B., Teska, J. A., Hodgins, A. S., and Badger, E. D. Educational intervention at home by mothers of disadvantaged infants. Child Development, 1970, 41, 925-935.

PROGRAM AGENCY OR SPONSOR: University of Illinois, Department of Special Education.

FUNDED BY: Bureau of Research, USOE and the Office of Economic Opportunity.

PROGRAM METHOD: 2-hour weekly meetings to discuss child and mother-centered activities mothers could do with their infants at home, supplemented with monthly home visits by staff to reinforce teaching principles taught at meetings.

EVALUATION DESIGN:

SAMPLE: 15 mother-child pairs; mean infant age was 20 months at beginning of project. Control group of 15 children for whom data were already available. Comparison group of 6 older siblings.

OUTCOME MEASURES: Stanford-Binet, ITPA

PREDICTOR MEASURES: Group

LENGTH OF STUDY: 15 months

FINDINGS:

1) Comparisons with matched controls: Binet IQ at end of program significantly above controls (difference = 16 points); ITPA Language Age significantly higher for treatment group.
2) Comparisons with sibling controls: 28-point advantage of treatment children over siblings was significant even with small N. The difference in ITPA score approached significance.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children.

FAMILY CHARACTERISTICS: Yes, for matching control children and for describing sample.

PROCESS OF HOME VISIT: Yes, described in some detail.

TRAINING OF HOME VISITORS: Yes, described briefly.

STAFF ORGANIZATION: No.

PROGRAM COSTS: No.

STRENGTHS: Interesting combination of weekly instruction and less frequent home visits.

SHORTCOMINGS: Comparability of control group is open to question.

Klaus, R. A. and Gray, S. W. The early training project for disadvantaged children: a report after five years. Monographs of the Society for Research in Child Development, 1968, 33 (4).

PROGRAM AGENCY OR SPONSOR: George Peabody College for Teachers, Nashville, Tennessee.

FUNDED BY: National Institute of Mental Health, and National Institute of Child Health and Human Development.

PROGRAM METHOD: Children attended a center-based 10-week preschool program during the summers, one group for 3 summers and a second group for 2 summers. A home visiting program took place during the summer programs and through the rest of the year, involving mothers and children, with an educational emphasis. Visits were for one hour weekly. Control group children received neither preschool nor home visits.

EVALUATION DESIGN:

SAMPLE: 88 low-income Black children born in 1958. From an initial sample of 61 children, three groups were constituted by random assignment: 1) three summers of preschool and home visiting; 2) two summers of preschool and home visiting; and 3) local control. A distal control group was selected from a city 60 miles away.

OUTCOME MEASURES: All children were tested twice a year for three years prior to elementary school and once a year in first and second grades. Binet and WISC intelligence scales, PPVT, ITPA, Metropolitan and Gates Reading Readiness Tests, Metropolitan Achievement Test, Stanford Achievement Tests and several non-standardized instruments were used for children. Mothers were interviewed. Younger siblings were given the Binet; older siblings were given achievement tests.

PREDICTOR MEASURES: Treatment group, sex of child, family characteristics.

LENGTH OF STUDY: Five years: Two to three years of intervention and two years of follow-up testing.

FINDINGS: For children: Binet and WISC - after both groups had begun treatment, the treatment groups were consistently superior to the control groups at every testing period. ITPA - treatment groups were superior to controls during last year of preschool and first year of elementary school, but all groups were equal in second year of school. PPVT - overall, no differences between groups. Reading Readiness Tests - during first grade, the treatment groups were generally superior to the control groups. Achievement Tests - for 10 of 21 comparisons, the distal control group was significantly lower than the other three groups. On nonstandardized measures selected to reflect program goals, the treatment groups were superior to control groups on Reflectivity - Impulsivity; but there were no differences on Self-Concept, Reputation among peers, Social Deprivation, Delay of Gratification, Achievement Motivation and Social Schemata. This lack of differences was attributed largely to the inadequacy of the measures. In general, no sex differences were found. For mothers: Mothers of experimental children more frequently reported sharing activities with their children in an academic manner: reading and school-like activities.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers.

FAMILY CHARACTERISTICS: Contained in sample description and addressed in relation to a measure of Social Schemata.

PROCESS OF HOME VISIT: Described

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Attempted to use some outcome measures beyond intelligence and achievement tests, that would reflect program goals. Utilized a "distal" control group in addition to a local control group to study effects of diffusion.

SHORTCOMINGS: Effects of the program on participating mothers were of an impressional nature only.

Lally, J. R. The family development research program; a program for prenatal, infant and early childhood enrichment. Progress Report, Syracuse University, 1973.

PROGRAM AGENCY OR SPONSOR: Syracuse University Children's Center

FUNDED BY: Office of Child Development, HEW

PROGRAM METHOD: Beginning 3 to 6 months before birth, paraprofessionals make weekly home visits for as long as child is in the program. At 6 months, infant begins a half-day, center-based program. From 15 to 48 months child attends the "Family Style Program," a full-day, multi-age group experience. A parent organization meets once a month and many parents participate in center activities.

EVALUATION DESIGN: Longitudinal; post-test only

SAMPLE: (for this report): Program group (N=42), low-education, matched controls (N=31), high-education contrast (N=17).

OUTCOME MEASURES: Children: Stanford-Binet, ITPA, Schaefer Classroom Behavior Inventory, Beller Autonomous Achievement Striving Scales, Schaefer Behavior Checklist, Coopersmith Behavioral Rating Form (adapted), Emmerich's Observer Ratings of Children, infant food intake. Mothers: Prenatal maternal diet, parent assessment of children interview, perceptions of program.

PREDICTOR MEASURES: Group

PROCESS MEASURE: Teachers: Assessing to Behavior of Caregiven Scales.

LENGTH OF STUDY: Families had been in program 3-1/2 years; this is first test point in a longitudinal study.

FINDINGS:

Children: 1) Stanford-Binet at 36 months: Program children significantly above controls but high-ed. contrast significantly above program group; 2) ITPA: high-ed. somewhat above program group who were somewhat above controls, but few significant differences; 3) Emmerich's Observer Ratings of Children: program children (N=13) rated more positively than controls (N=15) on 12 items; 4) parent assessment of children: program parents saw their children in a more positive light than did controls. The other measures were obtained for the program group only, but provide interesting data on the social behavior, achievement striving, self-concepts and diets of program children and on the quality of the caregiving.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers.

FAMILY CHARACTERISTICS: No

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Use of sensitive and relaxed testing procedures (note that the low-income controls had a mean IQ of 98.4 at 36 months). Detailed discussion of the Center's health and nutrition program. Included a process measure.

SHORTCOMINGS: No pretest or other child and family data that could be used as covariates. Several measures not obtained on control or contrast groups.

Lambie, D. Z., Bond, J. T., and Weikart, D. P. Home Teaching with Mothers and Infants. Ypsilanti, Michigan: High/Scope Educational Research Foundation, 1974.

PROGRAM AGENCY OR SPONSOR: High/Scope Educational Research Foundation.

FUNDED BY: Carnegie Corporation, Public Health Service, HEW, and the Spencer Foundation.

PROGRAM METHOD: Weekly visits of 60-90 minutes with mother and infant by professional home visitors for 16 months. Formally organized set of infant activities to support mother's objectives, based on Piagetian sensory-motor concepts. Supervisor met 10 hours a week with home visitors and made periodic visits, discussed planning for individual families and reviewed videotaped home visits. Heavy reliance upon mothers as teachers of their infants.

EVALUATION DESIGN: Longitudinal

SAMPLE: Project began with 88 infants who were 3, 7 or 11 months of age at entry and their mothers. At end of treatment N = 65. The N's for the experimental, contrast and control groups were 31, 30 and 27, respectively. Subjects assigned to group at random, with minor exceptions.

OUTCOME MEASURES: For infants: Bayley Mental Scale, Binet Language Scale, Bayley Motor Scale, Bayley Infant Behavior Record. For mothers: Verbal Interaction Record, Mother Observation Checklist, Ypsilanti Picture Sorting Inventory (YPSI)

PREDICTOR MEASURES: Treatment group and Age-at-entry (cohort)

LENGTH OF STUDY: 16-month home-visit program; testing every four months and follow-up testing 12 months after end of program.

FINDINGS:

The child: 1) At end of program experimental group significantly higher than contrast group on Bayley Mental Scale (adjusted for entering score). 2) 12 months later experimental group was above other two on Stanford-Binet, but not significantly (adjusted for entering Bayley Mental score). 3) Significant group effect found on Bayley Mental in repeated-measures analysis over all testpoints, with experimental group significantly above both the control and contrast groups. 5) No cohort effects. 4) Experimental group shows significantly more sophisticated language production and comprehension and more effective communication at end of project than contrast group, but not different from control group. 5) Entering Bayley Mental was strong predictor of final language score except for experimental group--experimental infants scored high regardless of entering ability. 6) No group differences on Bayley Motor at any testpoint. 7) Group differences on Bayley Infant Behavior Record were found on only two items.

The mother: 1) Total verbal interaction score (e.g., more expansions and questions, fewer negative imperatives) significantly higher at end of program for experimental group than the other two groups. 2) Mother's behavior during Bayley tests was most positive in the experimental group. 3) YPSI showed no group differences in mothers' perceptions of and expectations for their infants.

DOES STUDY ADDRESS:

OUTCOMES: Yes, both for infant and mother.

FAMILY CHARACTERISTICS: Sample is described carefully, but outcomes not measured against family characteristics.

PROCESS OF HOME VISIT: Described in great detail.

TRAINING OF HOME VISITORS: Briefly described.

STAFF ORGANIZATION: Yes, supervisory responsibilities described.

PROGRAM COSTS: No.

STRENGTHS: Program effectiveness measures not limited to single cognitive measure; repeated testing over course of program; 12-month follow-up measurement; careful description of analytic procedures.

SHORTCOMINGS:

Levenstein, P. Verbal Interaction Project: aiding cognitive growth in disadvantaged preschoolers through the mother-child home program. Final Report to Children's Bureau, Office of Child Development, Department of HEW, 1971.

PROGRAM AGENCY OR SPONSOR: Verbal Interaction Project, Family Service Association of Nassau County, Inc., Mineola, New York

FUNDED BY: Children's Bureau, Office of Child Development, HEW

PROGRAM METHOD: Social workers and paraprofessionals served as home visitors or "toy demonstrators" who gave mothers a set of verbal interaction stimulation materials (VISM) and demonstrated ways of increasing verbal interaction with their children. Visits were for one-half hour, twice weekly, and lasted for two years.

EVALUATION DESIGN:

SAMPLE: 90 mother-child pairs participated in the experimental program. Comparison group 1 received home visits only, comparison group 2 received no treatment and comparison group 3 received VISM only. Most were residents of low-income housing projects.

OUTCOME MEASURES: For children: Cattell Infant Intelligence Scale, Binet, PPVT, WISC, Wide Range Achievement Test, Boehm Test of Basic Concepts, teacher ratings. For mothers: interview data, home visit reports.

PREDICTOR MEASURES: Treatment group.

LENGTH OF STUDY: Two years of intervention, beginning at age two or three years and two years of follow up.

FINDINGS: Experimental children who were visited by professionals manifested gains significantly greater than the control groups: 17 points on the Binet and 12 points on the PPVT. There was no difference between the gains of children who entered at 2 or 3 years of age. The mother's IQ scores did not show significant gains, but there was some indication of positive attitude changes for mothers. Experimental children visited by nonprofessionals also showed gains significantly greater than controls. Comparison group 3, which received the VISM materials only also made significant gains. One and two year followups of the infants after termination of intervention showed that gains remained significant in spite of modest declines.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers.

FAMILY CHARACTERISTICS: Described.

PROCESS OF HOME VISIT: Described.

TRAINING OF HOME VISITORS: Described.

STAFF ORGANIZATION: Described.

PROGRAM COSTS: No.

STRENGTHS: Presents longitudinal followup data. Addresses issue of when intervention should begin for maximum benefit.

SHORTCOMINGS: Comparison groups were similar but not entirely comparable to the experimental group.

McCarthy, J. L. Changing parent attitudes and improving language and intellectual abilities of culturally disadvantaged four-year-old children through parent involvement. Bloomington, Indiana: Indiana University, School of Education, June 1968. ED 027 942

PROGRAM AGENCY OR SPONSOR: Indiana University, along with Head Start Centers in Terre Haute, Indiana

FUNDED BY: (not stated)

PROGRAM METHOD: One group of children attended regular Head Start classes with no parent involvement (control group). A second group of children attended Head Start and their parents attended parent meetings. A third group attended Head Start and the children and parents received weekly home visits conducted by the author, focusing on cognitive activities. Materials for activities were left in the home.

EVALUATION DESIGN:

SAMPLE: A total of 41 four-year-olds were assigned to the three groups: 10 in the control group; 17 in the parent meeting group; and 14 in the home visit group. The groups were matched on PPVT, ITPA, sex, parent education, ethnic background, and number of siblings.

OUTCOME MEASURES: PPVT, ITPA, parent attitude questionnaire.

PREDICTOR MEASURES: Treatment groups.

LENGTH OF STUDY: Eight months, from October 1966 through May 1967.

FINDINGS: For children: The home visit group was significantly higher than the control group on ITPA posttest scores. There were no group differences on the PPVT. For parents: The home visit group showed a significantly more positive attitude change, especially in the area of self-confidence, than did the control group.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and parents.

FAMILY CHARACTERISTICS: Described.

PROCESS OF HOME VISIT: Described briefly.

TRAINING OF HOME VISITORS: No.

STAFF ORGANIZATION: No.

PROGRAM COSTS: No.

STRENGTHS: Complete statement of hypotheses, review of the literature, description of procedures used.

SHORTCOMINGS: Findings were based on analyses of variance of posttest scores although hypotheses were stated in terms of gains.

Micotti, A. R. Dame School Project (Bilingual preschool project). Santa Clara County Office of Education, Final Report, August 1, 1970. ED 046 514.

PROGRAM AGENCY OR SPONSOR: Santa Clara County Office of Education, San Jose, California

FUNDED BY: (possibly Title VII)

PROGRAM METHOD: Eleven community women were trained (370 hours) to work as home teachers, developing concept formation and bilingual language skills, teaching mothers to work with their own children. Home teaching was for two hours daily, based on DARCEE program. Teachers were selected from volunteers; one half of them were high school graduates.

EVALUATION DESIGN:

SAMPLE: No control group; design was pretest-posttest. Treatment group consisted of 40 mother-child pairs. Children were 3.3 to 4 years of age. Mothers' primary language was Spanish. Families came from two target areas, both of which were low income (53% and 48% AFDC).

OUTCOME MEASURES: A Test of Basic Language Competence (English and Spanish), Inventory of Developmental Tasks (Spanish),, Maternal Teaching Style Instrument (Spanish), teacher evaluations.

PREDICTOR MEASURES: Treatment group.

LENGTH OF STUDY: Intervention included 4 months of Spanish instruction and 4 more months of bilingual instruction. Plans are to follow up with a kindergarten program for 20 of the children.

FINDINGS:

Children increased in color identification, physical abilities, part-whole relationships, and object identification.
Mothers made "considerable" changes in behavior on teaching and housekeeping and "some" changes in Mother Teaching Style.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers; but not in comparison to a control group.

FAMILY CHARACTERISTICS: Described.

PROCESS OF HOME VISIT: Described with general overview of specific areas of instruction.

TRAINING OF HOME VISITORS: Described, in terms of time, regularity, of preservice and inservice training.

STAFF ORGANIZATION: Yes, described.

PROGRAM COSTS: Reported as $2000 per child.

STRENGTHS: Program shows high parent involvement. Specific areas in curriculum and specific methods are described.

SHORTCOMINGS: Apparently no control group. Data and statistics are not detailed so it was not possible to adequately evaluate the results.

Sandler, H. M., Dokecki, P. R., Stewart, L. T., Britton, V., and Horton, D. M. The evaluation of a home-based educational intervention for preschoolers and their mothers. Journal of Community Psychology, 1973, 1, 372-375.

PROGRAM AGENCY OR SPONSOR: DARCEE, George Peabody College, Nashville, Tennessee

FUNDED BY: USOE through the National Program on Early Childhood Education of CEMREL, and by the Appalachian Regional Commission.

PROGRAM METHOD: Weekly home visits for 12 weeks consisting of behavior modeling, demonstration of materials, etc., by the paraprofessional home visitor; supervised by a professional home visitor.

EVALUATION DESIGN:

SAMPLE: 15 mother-child pairs from a Black and a white urban, low-income housing projects in Nashville. Assigned to experimental and comparison groups randomly, stratifying on IQ and race. Children averaged 43 months of age at beginning.

OUTCOME MEASURES: Stanford-Binet, DARCEE Concept Test used pre- and post. Maternal Teaching Style Instrument (MTSI) at end of program.

PREDICTOR MEASURES: Pretest scores

LENGTH OF STUDY: 12 weeks

FINDINGS:

1) No significant difference between groups at posttest, covarying on Binet pretest score.
2) DARCEE Concept Test: Treatment group gained significantly more on Recognition subtest and was slightly superior on other measures except Matching.
3) MTSI: t tests showed treatment mothers gave more Color and Shape Cue labels, fewer Inappropriate Directions.
4) Correlations of race, sex and summary MTSI variables: Mothers of females and mother of Black children were more negative in their MTSI responses.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children and mothers

FAMILY CHARACTERISTICS: Only in terms of race and sex of child

PROCESS OF HOME VISIT: Very briefly

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Examined both child and family outcomes; randomly assigned control group.

SHORTCOMINGS: Limited duration of intervention; small sample size.

Schaeffer, E. S. A home tutoring program. Children, 1969, 16, 59-61.

PROGRAM AGENCY OR SPONSOR: National Institute of Mental Health

FUNDED BY: National Institute of Mental Health

PROGRAM METHOD: College graduates, serving as "tutors", visited each home for one hour, five days a week, beginning when the child was 15 months and continuing to 36 months of age. Program was designed to develop positive family relationships and to provide verbal stimulation and increasingly complex experiences for the child. Mothers were encouraged but not required to participate.

EVALUATION DESIGN:

SAMPLE: All were Black male children from low income homes, in which the mothers had less than 12 years of schooling and/or an unskilled or semiskilled occupation. There were 31 in the experimental and 33 in the control group, from two neighborhoods which had a record of comparable readiness scores at school entrance

OUTCOME MEASURES: Bayley Infant Mental Test, Binet, John Hopkins Perceptual Test, PPVT, ratings of child behavior.

PREDICTOR MEASURES: Methods of child care - ratings by observers; treatment group.

LENGTH OF STUDY: Children were tested at 14, 21, 27, and 36 months of age. Participation in the program was for 21 months.

FINDINGS: For group comparisons: Both groups of children were above normal on IQ tests at 14 months of age, and were below normal at 21 months. But the experimental group IQ scores increased at 27 and 36 months while the control group remained low. Significant differences were found at 36 months in favor of the experimental group on the Johns Hopkins Perceptual Test, the PPVT, and ratings of task-oriented behavior. For childcare methods as related to child outcomes: Significant correlations were found between methods of childcare (defined as: child neglect and maternal hostile uninvolvement) and children's behavior and mental test scores.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children only.

FAMILY CHARACTERISTICS: Yes, an analysis of the relationship of childcare methods to child behavior and IQ scores was performed.

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: Described very briefly.

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Addresses aspects of child rearing as well as treatment group comparisons.

SHORTCOMINGS: No statistics or levels of significance were reported; so it is not possible to evaluate the findings adequately.

Tannenbaum, J. A. Home stimulation versus developmental scores for children attending the Children's Center, Syracuse, N.Y. Unpublished paper, 1969.

PROGRAM AGENCY OR SPONSOR: Syracuse University Children's Center

FUNDED BY: Children's Bureau, DHEW

PROGRAM METHOD: Center-based program for balanced population of lower and middle-class children (see Lally, 1973, for description of the program). This report does not refer to a home-based component, even though that is included in later reports of the Children's Center.

EVALUATION DESIGN:

SAMPLE: 26 lower-class and 20 middle class children (aged 7 months through 5 years) program for two years (fall, 1966 to spring, 1968).

OUTCOME MEASURES: Cattell for the younger children; Stanford-Binet for the older children

PREDICTOR MEASURES: Inventory of Home Stimulation (STIM); social class.

LENGTH OF STUDY: Two years.

FINDINGS:

1) All children gained in developmental score (Cattell or Binet) but middle class children gained more than lower class children.
2) Middle class families received higher STIM scores than lower class families.
3) High STIM scorers gained more on developmental scores, regardless of social class.
4) High-STIM, lower-class children gained more than low-STIM middle-class children.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children.

FAMILY CHARACTERISTICS: Yes, social class and home environment variables.

PROCESS OF HOME VISIT: No

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

STRENGTHS: Attempt to separate effects of social class and home environment.

SHORTCOMINGS: No control group; no statistical tests reported.

Weikart, D. P., Deloria, D. J., Lawser, S. A. and Weigerink, R. Longitudinal results of the Ypsilanti Perry preschool project. Ypsilanti, Michigan: High/Scope Educational Research Foundation, 1970.

PROGRAM AGENCY OR SPONSOR: Ypsilanti Board of Education, Washtenaw County Board of Education, and High/Scope Educational Research Foundation

FUNDED BY: U.S. Office of Education

PROGRAM METHOD: Daily cognitively oriented preschool program and home visits conducted weekly to involve mothers in the educative process. The preschool curriculum was derived mainly from Piagetian theory and focused on cognitive objectives, geared toward the individual child's level of development. During home visits mother was encouraged to participate in actual instruction of her child and child management techniques emphasized alternative ways of handling children. Group meetings served to reinforce individual parent's views. Two-year program (except for the first wave, which was one year).

EVALUATION DESIGN:

SAMPLE: A total of 58 experimental and 65 control children participated in the program in five cohorts or "waves". The N for each group in each wave varied from 8 to 15. Mean age at entry was 3 1/2. Assignment of children to group was "essentially random", but matched on Cultural Deprivation rating and IQ.

OUTCOME MEASURES: Stanford-Binet (L-M), Leiter, PPVT, ITPA administered fall of entering year and every spring thereafter; California Achievement Tests, Gates Reading Tests (not reported) administered after children entered school; Pupil Behavior Inventory and Ypsilanti Rating Scale collected kindergarten through third grade.

PREDICTOR MEASURES: Treatment group, Cognitive Home Environment Scale (CHES), Inventory of Attitudes of Family Life and Children, Perry Demographic Questionnaire, birth complications, sex.

LENGTH OF STUDY: Project began in 1962-67 and data are reported through 1966-67; in that year wave 4 completed the second year of preschool and wave 0 completed third grade.

FINDINGS: Experimental group significantly above controls on Stanford-Binet at the end of the first and second years of preschool and at the end of kindergarten and first grade; no difference at end of second or third grade. Experimental group significantly above controls on Leiter at end of first and second years of preschool, but also above at entry. Experimental group significantly higher on PPVT at end of both preschool years and at end of kindergarten and first grade, but also higher at entry; no differences at end of second or third grade. On ITPA total language experimental group was significantly above controls at end of second year of preschool; no difference at other testpoints. On ITPA Auditory-Vocal Association, experimental significantly above controls at second year of preschool and at kindergarten through second grade; but initial difference also significant. CAT means significantly favored experimental group at end of first and third grade. On Pupil Behavior Inventory, after kindergarten experimental group was above control at every testpoint on every factor, although most of these differences were not significant. Ypsilanti Rating Scale ratings were generally higher for experimental group as follows: Academic Potential at end of second grade, Social Development at first and second grade, Verbal Skill at second grade and Emotional Development at second grade.

DOES STUDY ADDRESS:

OUTCOMES: Yes, for children.

FAMILY CHARACTERISTICS: Extensive demographic data, description of home environment, mothers' attitudes on family life and children, cognitive home environment variables, birth history of child.

PROCESS OF HOME VISIT: Yes, summarized.

TRAINING OF HOME VISITORS: No, but supervision addressed.

STAFF ORGANIZATION: No.

PROGRAM COSTS: No.

STRENGTHS: Detailed description of sample; appendices include all unpublished instruments with scoring instructions.

SHORTCOMINGS: Analyses of variance did not adjust for pretest differences between groups; longitudinal design not complete at time of this report--the third grade time point included only one cohort.

Wright, C., Lally, J. R., and Dibble, M. Prenatal-postnatal intervention: A description and discussion of preliminary findings of a home visit program supplying cognitive, nutritional and health information to disadvantaged homes. Paper presented at the annual meeting of the American Psychological Association, Miami, 1970.

PROGRAM AGENCY OR SPONSOR: Syracuse University, Syracuse, N.Y.

FUNDED BY: CWRD, HEW

PROGRAM METHOD: Ten paraprofessional home visitors each visited 20 families to provide information on nutrition, health during pregnancy and on emotional, cognitive, medical and maternal needs of the child after birth. Materials include those developed by Gordon & Lally (1967) and by the John Tracy Clinic (1968). At six months child is enrolled in nursery school for half-day.

EVALUATION DESIGN:

SAMPLE: Low income mothers and infants; prenatal or 6-months old at beginning of project.

OUTCOME MEASURES: Weekly Home Visit Report (N=65), Nutritional questionnaire (N=73) infants, 31 mothers) Casework Interviews (N=10)

PREDICTOR MEASURES: Program group only

LENGTH OF STUDY: From 3 months prior to delivery to 18 months of age for each family.

FINDINGS:

Home Visit Report: Frequency responses to questions such as "What was the mother's reaction to various exercises?" "Were children's books or educational toys present in the home?"

Casework Interviews: Responses show the need for a broadly defined service role because of the diversity of problems faced by the mothers.

Nutrition questionnaire: Nutritional needs of mothers and infants are not being met.

DOES STUDY ADDRESS:

OUTCOMES: Not in the usual sense of program effects.

FAMILY CHARACTERISTICS: Only to briefly describe the participants.

PROCESS OF HOME VISIT: Very briefly

TRAINING OF HOME VISITORS: No

STAFF ORGANIZATION: No

PROGRAM COSTS: No

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STRENGTHS: Practical suggestions for program operation and record keeping.

SHORTCOMINGS: Since this is a preliminary report, program effects are not addressed.